

# Encarnaci3n Ruiz

## List of Publications by Year in descending order

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Version: 2024-02-01

126  
papers

5,995  
citations

53794

45  
h-index

85541

71  
g-index

127  
all docs

127  
docs citations

127  
times ranked

5584  
citing authors

#	ARTICLE	IF	CITATIONS
1	Conversion of olive tree biomass into fermentable sugars by dilute acid pretreatment and enzymatic saccharification. <i>Bioresource Technology</i> , 2008, 99, 1869-1876.	9.6	274
2	Enhanced enzymatic hydrolysis of olive tree wood by steam explosion and alkaline peroxide delignification. <i>Process Biochemistry</i> , 2006, 41, 423-429.	3.7	243
3	Engineering aspects of hydrothermal pretreatment: From batch to continuous operation, scale-up and pilot reactor under biorefinery concept. <i>Bioresource Technology</i> , 2020, 299, 122685.	9.6	236
4	Production of fuel ethanol from steam-explosion pretreated olive tree pruning. <i>Fuel</i> , 2008, 87, 692-700.	6.4	203
5	Evaluation of steam explosion pre-treatment for enzymatic hydrolysis of sunflower stalks. <i>Enzyme and Microbial Technology</i> , 2008, 42, 160-166.	3.2	181
6	Influence of solid loading on enzymatic hydrolysis of steam exploded or liquid hot water pretreated olive tree biomass. <i>Process Biochemistry</i> , 2007, 42, 1003-1009.	3.7	179
7	Water hyacinth a potential source for value addition: An overview. <i>Bioresource Technology</i> , 2017, 230, 152-162.	9.6	141
8	Protein extraction from agri-food residues for integration in biorefinery: Potential techniques and current status. <i>Bioresource Technology</i> , 2019, 280, 459-477.	9.6	137
9	Recent advances in the production of value added chemicals and lipids utilizing biodiesel industry generated crude glycerol as a substrate – Metabolic aspects, challenges and possibilities: An overview. <i>Bioresource Technology</i> , 2017, 239, 507-517.	9.6	121
10	Antioxidant activity of the phenolic compounds released by hydrothermal treatments of olive tree pruning. <i>Food Chemistry</i> , 2009, 114, 806-812.	8.2	112
11	Hydrothermal pre-treatment of rapeseed straw. <i>Bioresource Technology</i> , 2010, 101, 2428-2435.	9.6	110
12	Optimization of ultrasound-assisted extraction of biomass from olive trees using response surface methodology. <i>Ultrasonics Sonochemistry</i> , 2019, 51, 487-495.	8.2	108
13	Heavy metal tolerance of microorganisms isolated from wastewaters: Identification and evaluation of its potential for biosorption. <i>Chemical Engineering Journal</i> , 2012, 210, 325-332.	12.7	98
14	Content of phenolic compounds and mannitol in olive leaves extracts from six Spanish cultivars: Extraction with the Soxhlet method and pressurized liquids. <i>Food Chemistry</i> , 2020, 320, 126626.	8.2	87
15	Techno-economic and environmental assessment of an olive stone based biorefinery. <i>Resources, Conservation and Recycling</i> , 2014, 92, 145-150.	10.8	84
16	Xylitol production by <i>Debaryomyces hansenii</i> and <i>Candida guilliermondii</i> from rapeseed straw hemicellulosic hydrolysate. <i>Bioresource Technology</i> , 2018, 247, 736-743.	9.6	83
17	Assessing cellulose nanofiber production from olive tree pruning residue. <i>Carbohydrate Polymers</i> , 2018, 179, 252-261.	10.2	80
18	Optimization of uncatalyzed steam explosion pretreatment of rapeseed straw for biofuel production. <i>Bioresource Technology</i> , 2015, 190, 97-105.	9.6	77

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19	Valorisation of olive agro-industrial by-products as a source of bioactive compounds. <i>Science of the Total Environment</i> , 2018, 645, 533-542.	8.0	77
20	Bioethanol production from rapeseed straw at high solids loading with different process configurations. <i>Fuel</i> , 2014, 122, 112-118.	6.4	76
21	Optimization of dilute-phosphoric-acid steam pretreatment of <i>Eucalyptus benthamii</i> for biofuel production. <i>Applied Energy</i> , 2014, 125, 76-83.	10.1	76
22	Different process configurations for bioethanol production from pretreated olive pruning biomass. <i>Journal of Chemical Technology and Biotechnology</i> , 2011, 86, 881-887.	3.2	74
23	The fermentation of mixtures of D-glucose and D-xylose by <i>Candida shehatae</i> , <i>Pichia stipitis</i> or <i>Pachysolen tannophilus</i> to produce ethanol. <i>Journal of Chemical Technology and Biotechnology</i> , 2002, 77, 641-648.	3.2	72
24	Acid hydrolysis of olive tree biomass. <i>Chemical Engineering Research and Design</i> , 2010, 88, 633-640.	5.6	70
25	Production, purification and characterisation of oligosaccharides from olive tree pruning autohydrolysis. <i>Industrial Crops and Products</i> , 2012, 40, 225-231.	5.2	70
26	Pretreatment of olive tree biomass with FeCl <sub>3</sub> prior enzymatic hydrolysis. <i>Bioresource Technology</i> , 2013, 128, 180-187.	9.6	67
27	Combined acid/alkaline-peroxide pretreatment of olive tree biomass for bioethanol production. <i>Bioresource Technology</i> , 2017, 239, 326-335.	9.6	67
28	Olive-derived biomass as a source of energy and chemicals. <i>Biofuels, Bioproducts and Biorefining</i> , 2017, 11, 1077-1094.	3.7	67
29	Residual biomass potential in olive tree cultivation and olive oil industry in Spain: valorization proposal in a biorefinery context. <i>Spanish Journal of Agricultural Research</i> , 2017, 15, e0206.	0.6	65
30	Inhibition of <i>Pichia stipitis</i> fermentation of hydrolysates from olive tree cuttings. <i>World Journal of Microbiology and Biotechnology</i> , 2009, 25, 891-899.	3.6	63
31	Obtaining sugars and natural antioxidants from olive leaves by steam-explosion. <i>Food Chemistry</i> , 2016, 210, 457-465.	8.2	63
32	Hydrothermal pre-treatment and enzymatic hydrolysis of sunflower stalks. <i>Fuel</i> , 2011, 90, 3225-3229.	6.4	62
33	Extraction of oleuropein and luteolin-7-O-glucoside from olive leaves: Optimization of technique and operating conditions. <i>Food Chemistry</i> , 2019, 293, 161-168.	8.2	62
34	Comparison of process configurations for ethanol production from two-step pretreated sugarcane bagasse. <i>Chemical Engineering Journal</i> , 2011, 175, 185-191.	12.7	61
35	Olive-derived biomass as a renewable source of value-added products. <i>Process Biochemistry</i> , 2020, 97, 43-56.	3.7	61
36	Ethanol Production From Pretreated Olive Tree Wood and Sunflower Stalks by an SSF Process. <i>Applied Biochemistry and Biotechnology</i> , 2006, 130, 631-643.	2.9	59

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37	Ethanolic fermentation of phosphoric acid hydrolysates from olive tree pruning. <i>Industrial Crops and Products</i> , 2007, 25, 160-168.	5.2	59
38	Preliminary evaluation of organosolv pre-treatment of sugar cane bagasse for glucose production: Application of 23 experimental design. <i>Applied Energy</i> , 2010, 87, 109-114.	10.1	59
39	An approach to optimization of enzymatic hydrolysis from sugarcane bagasse based on organosolv pretreatment. <i>Journal of Chemical Technology and Biotechnology</i> , 2010, 85, 1092-1098.	3.2	58
40	Recycling of washed olive pomace ash for fired clay brick manufacturing. <i>Construction and Building Materials</i> , 2014, 61, 320-326.	7.2	56
41	Dilute acid pretreatment of rapeseed straw for fermentable sugar generation. <i>Bioresource Technology</i> , 2011, 102, 1270-1276.	9.6	55
42	Valorisation of olive stone by-product for sugar production using a sequential acid/steam explosion pretreatment. <i>Industrial Crops and Products</i> , 2020, 148, 112279.	5.2	55
43	Application of a combined fungal and diluted acid pretreatment on olive tree biomass. <i>Industrial Crops and Products</i> , 2018, 121, 10-17.	5.2	54
44	Techno-economic evaluation of strategies based on two steps organosolv pretreatment and enzymatic hydrolysis of sugarcane bagasse for ethanol production. <i>Renewable Energy</i> , 2016, 86, 270-279.	8.9	51
45	Ethanol Production from Brewersâ€™ Spent Grain Pretreated by Dilute Phosphoric Acid. <i>Energy &amp; Fuels</i> , 2018, 32, 5226-5233.	5.1	51
46	Valorization of olive mill leaves through ultrasound-assisted extraction. <i>Food Chemistry</i> , 2020, 314, 126218.	8.2	48
47	Dilute sulfuric acid pretreatment of sunflower stalks for sugar production. <i>Bioresource Technology</i> , 2013, 140, 292-298.	9.6	47
48	High Solids Loading Pretreatment of Olive Tree Pruning with Dilute Phosphoric Acid for Bioethanol Production by <i>Escherichia coli</i> . <i>Energy &amp; Fuels</i> , 2015, 29, 1735-1742.	5.1	46
49	Potential for ethanol production from different sorghum cultivars. <i>Industrial Crops and Products</i> , 2017, 109, 367-373.	5.2	46
50	Fired clay masonry units production incorporating two-phase olive mill waste (alperujo). <i>Ceramics International</i> , 2012, 38, 5027-5037.	4.8	44
51	Supercritical fluid extraction for enhancing polyphenolic compounds production from olive waste extracts. <i>Journal of Chemical Technology and Biotechnology</i> , 2020, 95, 356-362.	3.2	44
52	Brewerâ€™s spent grain as a source of renewable fuel through optimized dilute acid pretreatment. <i>Renewable Energy</i> , 2020, 148, 81-90.	8.9	43
53	Liquid hot water pretreatment of olive tree pruning residues. <i>Applied Biochemistry and Biotechnology</i> , 2007, 137-140, 379-394.	2.9	41
54	Organosolv pretreatment of olive tree biomass for fermentable sugars. <i>Holzforschung</i> , 2011, 65, .	1.9	41

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55	Optimization of Oleuropein and Luteolin-7-O-Glucoside Extraction from Olive Leaves by Ultrasound-Assisted Technology. <i>Energies</i> , 2019, 12, 2486.	3.1	41
56	Fermentation of olive tree pruning acid-hydrolysates by <i>Pachysolen tannophilus</i> . <i>Biochemical Engineering Journal</i> , 2007, 36, 108-115.	3.6	39
57	Biosorption of Pb(II) Ions by <i>Klebsiella</i> sp. 3S1 Isolated from a Wastewater Treatment Plant: Kinetics and Mechanisms Studies. <i>BioMed Research International</i> , 2015, 2015, 1-12.	1.9	39
58	Optimization of dilute acid pretreatment of Agave lechuguilla and ethanol production by co-fermentation with <i>Escherichia coli</i> MM160. <i>Industrial Crops and Products</i> , 2018, 114, 154-163.	5.2	38
59	Avocado-Derived Biomass as a Source of Bioenergy and Bioproducts. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8195.	2.5	38
60	Fermentable sugar production from rapeseed straw by dilute phosphoric acid pretreatment. <i>Industrial Crops and Products</i> , 2013, 50, 525-531.	5.2	37
61	Valorisation of Exhausted Olive Pomace by an Eco-Friendly Solvent Extraction Process of Natural Antioxidants. <i>Antioxidants</i> , 2020, 9, 1010.	5.1	36
62	High level xylitol production by <i>Pichia fermentans</i> using non-detoxified xylose-rich sugarcane bagasse and olive pits hydrolysates. <i>Bioresource Technology</i> , 2021, 342, 126005.	9.6	36
63	Antioxidant activity of liquors from steam explosion of <i>Olea europea</i> wood. <i>Wood Science and Technology</i> , 2008, 42, 579-592.	3.2	35
64	Restructuring the processes for furfural and xylose production from sugarcane bagasse in a biorefinery concept for ethanol production. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 85, 196-202.	3.6	35
65	Experimental study on ethanol production from hydrothermal pretreated rapeseed straw by simultaneous saccharification and fermentation. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 104-110.	3.2	33
66	Low energy-demanding recovery of antioxidants and sugars from olive stones as preliminary steps in the biorefinery context. <i>Industrial Crops and Products</i> , 2014, 60, 30-38.	5.2	33
67	Biosorption of Ag(I) from aqueous solutions by <i>Klebsiella</i> sp. 3S1. <i>Journal of Hazardous Materials</i> , 2017, 329, 166-177.	12.4	32
68	Bifidobacterial growth stimulation by oligosaccharides generated from olive tree pruning biomass. <i>Carbohydrate Polymers</i> , 2017, 169, 149-156.	10.2	32
69	Optimization of sugar recovery from rapeseed straw pretreated with FeCl <sub>3</sub> . <i>Bioresource Technology</i> , 2018, 268, 204-211.	9.6	32
70	Biorefining for olive wastes management and efficient bioenergy production. <i>Energy Conversion and Management</i> , 2021, 244, 114467.	9.2	32
71	Design and Optimization of Sulfuric Acid Pretreatment of Extracted Olive Tree Biomass Using Response Surface Methodology. <i>BioResources</i> , 2016, 12, .	1.0	31
72	How Cultivar and Extraction Conditions Affect Antioxidants Type and Extractability for Olive Leaves Valorization. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 5107-5118.	6.7	31

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73	Olive Pomace-Derived Biomasses Fractionation through a Two-Step Extraction Based on the Use of Ultrasounds: Chemical Characteristics. <i>Foods</i> , 2021, 10, 111.	4.3	30
74	A biorefinery approach to obtain antioxidants, lignin and sugars from exhausted olive pomace. <i>Journal of Industrial and Engineering Chemistry</i> , 2021, 96, 356-363.	5.8	29
75	Comparison of fermentation strategies for ethanol production from olive tree pruning biomass. <i>Industrial Crops and Products</i> , 2018, 122, 98-106.	5.2	27
76	Sustainable Production of Carbon Nanoparticles from Olive Pit Biomass: Understanding Proton Transfer in the Excited State on Carbon Dots. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10493-10500.	6.7	26
77	Process optimisation for production and recovery of succinic acid using xylose-rich hydrolysates by <i>Actinobacillus succinogenes</i> . <i>Bioresource Technology</i> , 2022, 344, 126224.	9.6	26
78	Removal of Pb(II) in a packed-bed column by a <i>Klebsiella</i> sp. 3S1 biofilm supported on porous ceramic Raschig rings. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 40, 118-127.	5.8	24
79	Manufacture of Sustainable Clay Bricks Using Waste from Secondary Aluminum Recycling as Raw Material. <i>Materials</i> , 2018, 11, 2439.	2.9	24
80	Techno-economic feasibility of bioethanol production via biorefinery of olive tree prunings (OTP): optimization of the pretreatment stage. <i>Holzforschung</i> , 2018, 73, 3-13.	1.9	24
81	Olive tree pruning as an agricultural residue for ethanol production. Fermentation of hydrolysates from dilute acid pretreatment. <i>Spanish Journal of Agricultural Research</i> , 2012, 10, 643.	0.6	22
82	Advanced bioethanol production from olive tree biomass using different bioconversion schemes. <i>Biochemical Engineering Journal</i> , 2018, 137, 172-181.	3.6	21
83	Integrated Process for Sequential Extraction of Bioactive Phenolic Compounds and Proteins from Mill and Field Olive Leaves and Effects on the Lignocellulosic Profile. <i>Foods</i> , 2019, 8, 531.	4.3	21
84	Ultrasound-Assisted Extraction as a First Step in a Biorefinery Strategy for Valorisation of Extracted Olive Pomace. <i>Energies</i> , 2019, 12, 2679.	3.1	20
85	Xylitol Production from Exhausted Olive Pomace by <i>Candida boidinii</i> . <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6966.	2.5	19
86	Production of Ethanol from Hemicellulosic Sugars of Exhausted Olive Pomace by <i>Escherichia coli</i> . <i>Processes</i> , 2020, 8, 533.	2.8	19
87	Sugar fermentation by <i>Fusarium oxysporum</i> to produce ethanol. <i>World Journal of Microbiology and Biotechnology</i> , 2007, 23, 259-267.	3.6	18
88	Structural characteristics of lignin in pruning residues of olive tree ( <i>Olea europaea</i> L.). <i>Holzforschung</i> , 2018, 73, 25-34.	1.9	18
89	The biorefinery concept for the industrial valorization of residues from olive oil industry. , 2017, , 57-78.		17
90	Recovery of Bioactive Compounds from Industrial Exhausted Olive Pomace through Ultrasound-Assisted Extraction. <i>Biology</i> , 2021, 10, 514.	2.8	17

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91	Determination of the Lignocellulosic Components of Olive Tree Pruning Biomass by Near Infrared Spectroscopy. <i>Energies</i> , 2019, 12, 2497.	3.1	16
92	Bioethanol Production from Steam-Exploded Barley Straw by Co-Fermentation with <i>Escherichia coli</i> SL100. <i>Agronomy</i> , 2022, 12, 874.	3.0	16
93	Bioconversion of Rapeseed Straw: Enzymatic Hydrolysis of Whole Slurry and Cofermentation by an Ethanologenic <i>Escherichia coli</i> . <i>Energy &amp; Fuels</i> , 2016, 30, 9532-9539.	5.1	15
94	Comparative analysis of data mining and response surface methodology predictive models for enzymatic hydrolysis of pretreated olive tree biomass. <i>Computers and Chemical Engineering</i> , 2017, 101, 23-30.	3.8	15
95	Ethanol production from rape straw by a two-stage pretreatment under mild conditions. <i>Bioprocess and Biosystems Engineering</i> , 2015, 38, 1469-1478.	3.4	14
96	Optimization with Response Surface Methodology of Microwave-Assisted Conversion of Xylose to Furfural. <i>Molecules</i> , 2020, 25, 3574.	3.8	14
97	Effect of Olive-Pine Bottom Ash on Properties of Geopolymers Based on Metakaolin. <i>Materials</i> , 2020, 13, 901.	2.9	14
98	Characterization of the lignocellulosic and sugars composition of different olive leaves cultivars. <i>Food Chemistry</i> , 2020, 329, 127153.	8.2	13
99	Valorization of renewable resources to functional oligosaccharides: Recent trends and future prospective. <i>Bioresource Technology</i> , 2022, 346, 126590.	9.6	13
100	The potential role of olive groves to deliver carbon dioxide removal in a carbon-neutral Europe: Opportunities and challenges. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 165, 112609.	16.4	13
101	Endophytic Fungi as Pretreatment to Enhance Enzymatic Hydrolysis of Olive Tree Pruning. <i>BioMed Research International</i> , 2017, 2017, 1-10.	1.9	12
102	Exploitation of olive tree pruning biomass through hydrothermal pretreatments. <i>Industrial Crops and Products</i> , 2022, 176, 114425.	5.2	12
103	Comparative study of adjuvants for extraction of olive oil. <i>European Food Research and Technology</i> , 2015, 241, 759-768.	3.3	11
104	Microwave-assisted production of furfural from the hemicellulosic fraction of olive stones. <i>Chemical Engineering Research and Design</i> , 2021, 152, 630-640.	5.6	11
105	Biosorption mechanisms of Ag(I) and the synthesis of nanoparticles by the biomass from <i>Botryosphaeria rhodina</i> MAMB-05. <i>Journal of Hazardous Materials</i> , 2021, 420, 126598.	12.4	11
106	Avocado-Derived Biomass: Chemical Composition and Antioxidant Potential. <i>Proceedings (mdpi)</i> , 2020, 70, .	0.2	11
107	Removal of heavy metals by <i>Klebsiella</i> sp. 3S1. Kinetics, equilibrium and interaction mechanisms of Zn(II) biosorption. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 1370-1380.	3.2	10
108	Sequential Extraction of Hydroxytyrosol, Mannitol and Triterpenic Acids Using a Green Optimized Procedure Based on Ultrasound. <i>Antioxidants</i> , 2021, 10, 1781.	5.1	10

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109	An approach to cellulase recovery from enzymatic hydrolysis of pretreated sugarcane bagasse with high lignin content. <i>Biocatalysis and Biotransformation</i> , 2015, 33, 287-297.	2.0	9
110	Composition of secoiridoid derivatives from Picual virgin olive oil using response surface methodology with regard to malaxation conditions, fruit ripening, and irrigation management. <i>European Food Research and Technology</i> , 2016, 242, 1709-1718.	3.3	9
111	Learning and researching based on local experience and simulation software for graduate and undergraduate courses in chemical and environmental engineering. <i>Education for Chemical Engineers</i> , 2017, 21, 50-61.	4.8	9
112	Combined Extraction and Ethanol Organosolv Fractionation of Exhausted Olive Pomace for Bioactive Compounds. <i>Advanced Sustainable Systems</i> , 0, , 2100361.	5.3	8
113	Liquid Hot Water Pretreatment of Olive Tree Pruning Residues. , 2007, , 379-394.		7
114	Location of Biorefineries Based on Olive-Derived Biomass in Andalusia, Spain. <i>Energies</i> , 2021, 14, 3052.	3.1	6
115	Wood Bottom Ash and GeoSilex: A By-Product of the Acetylene Industry as Alternative Raw Materials in Calcium Silicate Units. <i>Materials</i> , 2020, 13, 489.	2.9	5
116	Biotechnological use of the ubiquitous fungus <i>Penicillium</i> sp. 8L2: Biosorption of Ag(I) and synthesis of silver nanoparticles. <i>Journal of Environmental Management</i> , 2022, 316, 115281.	7.8	5
117	Assessment of By-Product from <i>Botryosphaeria rhodina</i> MAMB-05 as an Effective Biosorbent of Pb(II). <i>Molecules</i> , 2019, 24, 3306.	3.8	3
118	Biorefinery Based on Waste Biomass. <i>Energies</i> , 2022, 15, 54.	3.1	2
119	Biorefineries: a step forward to a circular bioeconomy. <i>Biofuels, Bioproducts and Biorefining</i> , 2020, 14, 5-6.	3.7	1
120	Production of renewable products from brewery spent grains. , 2021, , 305-347.		1
121	Comparison of Untapped Agroindustrial Olive Resources with Olive Leaves. <i>Proceedings (mdpi)</i> , 2020, 79, .	0.2	1
122	Recovery of Antioxidant Compounds from Exhausted Olive Pomace through Microwave-Assisted Extraction. , 2021, 6, .		1
123	Extraction Strategies to Recover Bioactive Compounds, Incorporation into Food and Health Benefits: Current Works and Future Challenges. <i>Foods</i> , 2020, 9, 393.	4.3	0
124	Therapeutic Bio-Compounds from Avocado Residual Biomass. <i>Proceedings (mdpi)</i> , 2020, 79, .	0.2	0
125	Evaluation of Technologies for the Co-Extraction of Phenolic Compounds and Proteinaceous Material from Olive-Derived Biomasses. , 2021, 6, .		0
126	Effective Production of Bioactive Phenolic Compounds from Olive Stones. , 2021, 6, .		0