George Aggelis

List of Publications by Citations

129 papers	9,549 citations	54 h-index	96 g-index
135 ext. papers	10,511 ext. citations	4.9 avg, IF	6.43 L-index

#	Paper	IF	Citations
129	Lipids of oleaginous yeasts. Part I: Biochemistry of single cell oil production. *European Journal of Lipid Science and Technology*, **2011**, 113, 1031-1051	3	447
128	Lipid production by Yarrowia lipolytica growing on industrial glycerol in a single-stage continuous culture. *Bioresource Technology*, **2002**, 82, 43-9	11	357
127	Biotechnological valorisation of raw glycerol discharged after bio-diesel (fatty acid methyl esters) manufacturing process: Production of 1,3-propanediol, citric acid and single cell oil. *Biomass and Bioenergy*, **2008**, 32, 60-71	5.3	306
126	Lipids of oleaginous yeasts. Part II: Technology and potential applications. *European Journal of Lipid Science and Technology*, **2011**, 113, 1052-1073	3	276
125	Evaluating renewable carbon sources as substrates for single cell oil production by Cunninghamella echinulata and Mortierella isabellina. *Biomass and Bioenergy*, **2009**, 33, 573-580	5.3	268
124	Microalgal lipids biochemistry and biotechnological perspectives. *Biotechnology Advances*, **2014**, 32, 1476-93	17.8	253
123	Yarrowia lipolytica as a potential producer of citric acid from raw glycerol. *Journal of Applied Microbiology*, **2002**, 92, 737-44	4.7	250
122	Metabolic activities of biotechnological interest in Yarrowia lipolytica grown on glycerol in repeated batch cultures. *Bioresource Technology*, **2010**, 101, 2351-8	11	242
121	Biotechnological conversions of biodiesel derived waste glycerol by yeast and fungal species. *Energy*, **2011**, 36, 1097-1108	7.9	222
120	Single cell oil production by Yarrowia lipolytica growing on an industrial derivative of animal fat in batch cultures. *Applied Microbiology and Biotechnology*, **2002**, 58, 308-12	5.7	222
119	Microbial oils as food additives: recent approaches for improving microbial oil production and its polyunsaturated fatty acid content. *Current Opinion in Biotechnology*, **2016**, 37, 24-35	11.4	206
118	Single cell oil (SCO) production by Mortierella isabellina grown on high-sugar content media. *Bioresource Technology*, **2004**, 95, 287-91	11	187
117	Single cell oil production from rice hulls hydrolysate. *Bioresource Technology*, **2011**, 102, 9737-42	11	180
116	Silver nanoparticles synthesis mediated by new isolates of Bacillus spp., nanoparticle characterization and their activity against Bean Yellow Mosaic Virus and human pathogens. *Frontiers in Microbiology*, **2015**, 6, 453	5.7	173
115	Phenolic removal in olive oil mill wastewater by strains of Pleurotus spp. in respect to their phenol oxidase (laccase) activity. *Bioresource Technology*, **2002**, 84, 251-7	11	173
114	Biotechnological valorization of biodiesel derived glycerol waste through production of single cell oil and citric acid by Yarrowia lipolytica. *Lipid Technology*, **2009**, 21, 83-87		171
113	Kinetic profile of the cellular lipid composition in an oleaginous Yarrowia lipolytica capable of producing a cocoa-butter substitute from industrial fats. *Antonie Van Leeuwenhoek*, **2001**, 80, 215-24	2.1	170

112	Phenolic removal in a model olive oil mill wastewater using Pleurotus ostreatus in bioreactor cultures and biological evaluation of the process. *Water Research*, **2003**, 37, 3897-904	12.5	167
111	Citric acid production by Yarrowia lipolytica cultivated on olive-mill wastewater-based media. *Bioresource Technology*, **2008**, 99, 2419-28	11	157
110	Accumulation of a cocoa-butter-like lipid by Yarrowia lipolytica cultivated on agro-industrial residues. *Current Microbiology*, **2003**, 46, 124-30	2.4	149
109	Repression of reserve lipid turnover in Cunninghamella echinulata and Mortierella isabellina cultivated in multiple-limited media. *Journal of Applied Microbiology*, **2004**, 97, 867-75	4.7	144
108	Yarrowia lipolytica: A model microorganism used for the production of tailor-made lipids. *European Journal of Lipid Science and Technology*, **2010**, 112, 639-654	3	143
107	Biochemical activities in Chlorella sp. and Nannochloropsis salina during lipid and sugar synthesis in a lab-scale open pond simulating reactor. *Journal of Biotechnology*, **2012**, 164, 318-29	3.7	137
106	Lipid production by oleaginous Mucorales cultivated on renewable carbon sources. *European Journal of Lipid Science and Technology*, **2007**, 109, 1060-1070	3	131
105	Semi-solid state fermentation of sweet sorghum for the biotechnological production of single cell oil. *Bioresource Technology*, **2010**, 101, 1385-8	11	130
104	Biosynthesis of lipids and organic acids by Yarrowia lipolytica strains cultivated on glucose. *European Journal of Lipid Science and Technology*, **2009**, 111, 1221-1232	3	122
103	Compositional shifts in lipid fractions during lipid turnover in Cunninghamella echinulata. *Enzyme and Microbial Technology*, **2007**, 40, 1321-1327	3.8	121
102	Influence of glucose and saturated free-fatty acid mixtures on citric acid and lipid production by Yarrowia lipolytica. *Current Microbiology*, **2006**, 52, 134-42	2.4	121
101	Modeling lipid accumulation and degradation in Yarrowia lipolytica cultivated on industrial fats. *Current Microbiology*, **2003**, 46, 398-402	2.4	118
100	Lipid production by yeasts growing on biodiesel-derived crude glycerol: strain selection and impact of substrate concentration on the fermentation efficiency. *Journal of Applied Microbiology*, **2015**, 118, 911-27	4.7	109
99	Industrial derivative of tallow: a promising renewable substrate for microbial lipid, single-cell protein and lipase production by Yarrowia lipolytica. *Electronic Journal of Biotechnology*, **2007**, 10, 0-0	3.1	104
98	Critical steps in carbon metabolism affecting lipid accumulation and their regulation in oleaginous microorganisms. *Applied Microbiology and Biotechnology*, **2018**, 102, 2509-2523	5.7	103
97	Organic nitrogen of tomato waste hydrolysate enhances glucose uptake and lipid accumulation in Cunninghamella echinulata. *Journal of Applied Microbiology*, **2008**, 105, 1062-70	4.7	100
96	Production of gamma-linolenic acid by Cunninghamella echinulata cultivated on glucose and orange peel. *Applied Microbiology and Biotechnology*, **2002**, 58, 303-7	5.7	100
95	Modeling of single-cell oil production under nitrogen-limited and substrate inhibition conditions. *Biotechnology and Bioengineering*, **2011**, 108, 1049-55	4.9	92

94	Commercial sugars as substrates for lipid accumulation in Cunninghamella echinulata and Mortierella isabellina fungi. *European Journal of Lipid Science and Technology*, **2010**, 112, 1048-1057	3	91
93	Biotechnological conversion of waste cooking olive oil into lipid-rich biomass using Aspergillus and Penicillium strains. *Journal of Applied Microbiology*, **2011**, 110, 1138-50	4.7	89
92	Fatty acid composition in lipid fractions lengthwise the mycelium of Mortierella isabellina and lipid production by solid state fermentation. *Bioresource Technology*, **2009**, 100, 6118-20	11	88
91	Lipid and γ-linolenic acid accumulation in strains of zygomycetes growing on glucose. *JAOCS, Journal of the American Oil ChemistskSociety*, **2001**, 78, 341-346	1.8	87
90	Lipids containing polyunsaturated fatty acids synthesized by zygomycetes grown on glycerol. *Applied Biochemistry and Biotechnology*, **2012**, 166, 146-58	3.2	85
89	Evaluation of white-rot fungi for detoxification and decolorization of effluents from the green olive debittering process. *Applied Microbiology and Biotechnology*, **2002**, 59, 353-60	5.7	83
88	High lipid accumulation in Yarrowia lipolytica cultivated under double limitation of nitrogen and magnesium. *Journal of Biotechnology*, **2016**, 234, 116-126	3.7	82
87	The effect of raw glycerol concentration on the production of 1,3-propanediol by Clostridium butyricum. *Journal of Chemical Technology and Biotechnology*, **2004**, 79, 1189-1196	3.5	80
86	Lipids of Cunninghamella echinulata with emphasis to gamma-linolenic acid distribution among lipid classes. *Applied Microbiology and Biotechnology*, **2006**, 73, 676-83	5.7	78
85	Selective uptake of fatty acids by the yeast Yarrowia lipolytica. *European Journal of Lipid Science and Technology*, **2003**, 105, 651-655	3	78
84	Modelling aspects of the biotechnological valorization of raw glycerol: production of citric acid by Yarrowia lipolytica and 1,3-propanediol by Clostridium butyricum. *Journal of Chemical Technology and Biotechnology*, **2003**, 78, 542-547	3.5	73
83	Bioconversion of olive mill wastewater into high-added value products. *Journal of Cleaner Production*, **2016**, 139, 957-969	10.3	73
82	Morphological and metabolic shifts of Yarrowia lipolytica induced by alteration of the dissolved oxygen concentration in the growth environment. *Microbiology (United Kingdom)*, **2014**, 160, 807-817	2.9	71
81	Importance of the methyl-citrate cycle on glycerol metabolism in the yeast Yarrowia lipolytica. *Journal of Biotechnology*, **2013**, 168, 303-314	3.7	71
80	Gamma-linolenic acid production by Cunninghamella echinulata growing on complex organic nitrogen sources. *Bioresource Technology*, **2008**, 99, 5986-90	11	71
79	Conversion of biodiesel-derived glycerol into biotechnological products of industrial significance by yeast and fungal strains. *Engineering in Life Sciences*, **2017**, 17, 262-281	3.4	66
78	Lipolytic and microbial changes during the natural fermentation and ripening of Greek dry sausages. *Meat Science*, **1993**, 35, 371-85	6.4	65
77	Prediction of lipid accumulation-degradation in oleaginous micro-organisms growing on vegetable oils. *Antonie Van Leeuwenhoek*, **1997**, 72, 159-65	2.1	63

76	Suitability of Low-Cost Sugars as Substrates for Lipid Production by the Fungus Thamnidium elegans. *Energy & Fuels*, **2010**, 24, 4078-4086	4.1	55
75	Biotreatment of raisin and winery wastewaters and simultaneous biodiesel production using a Leptolyngbya-based microbial consortium. *Journal of Cleaner Production*, **2017**, 148, 185-193	10.3	54
74	Production of secondary metabolites through glycerol fermentation under carbon-excess conditions by the yeasts Yarrowia lipolytica and Rhodosporidium toruloides. *European Journal of Lipid Science and Technology*, **2017**, 119, 1600507	3	54
73	Potential utilization of agro-industrial wastewaters for lipid production by the oleaginous yeast Debaryomyces etchellsii. *Journal of Cleaner Production*, **2016**, 133, 899-909	10.3	53
72	Oleaginous yeast Cryptococcus curvatus exhibits interplay between biosynthesis of intracellular sugars and lipids. *European Journal of Lipid Science and Technology*, **2015**, 117, 657-672	3	53
71	Production of added-value metabolites by growing in olive mill wastewater-based media under aseptic and non-aseptic conditions. *Engineering in Life Sciences*, **2017**, 17, 695-709	3.4	51
70	The olive mill wastewater as substrate for single cell oil production by Zygomycetes. *Journal of Biotechnology*, **2014**, 170, 50-9	3.7	50
69	Lipid synthesized by micro-algae grown in laboratory- and industrial-scale bioreactors. *Engineering in Life Sciences*, **2011**, 11, 52-58	3.4	50
68	Storage lipid and polysaccharide metabolism in Yarrowia lipolytica and Umbelopsis isabellina. *Applied Microbiology and Biotechnology*, **2017**, 101, 7213-7226	5.7	49
67	Microbial fatty acid specificity. *Folia Microbiologica*, **1997**, 42, 117-20	2.8	47
66	Enhancement of single cell oil production by Yarrowia lipolytica growing in the presence of Teucrium polium L. aqueous extract. *Biotechnology Letters*, **1999**, 21, 747-749	3	47
65	cultivated in NaCl-enriched glucose-based media: Adaptation dynamics and lipid production. *Engineering in Life Sciences*, **2017**, 17, 237-248	3.4	46
64	Laboratory evolution strategies for improving lipid accumulation in Yarrowia lipolytica. *Applied Microbiology and Biotechnology*, **2019**, 103, 8585-8596	5.7	46
63	Reuse of shrimp farm wastewater as growth medium for marine microalgae isolated from Red Sea Jeddah. *Journal of Cleaner Production*, **2018**, 198, 160-169	10.3	46
62	Aerated vs non-aerated conversions of molasses and olive mill wastewaters blends into bioethanol by Saccharomyces cerevisiae under non-aseptic conditions. *Industrial Crops and Products*, **2014**, 56, 83-93	5.9	44
61	Microbial sources of polyunsaturated fatty acids (PUFAs) and the prospect of organic residues and wastes as growth media for PUFA-producing microorganisms. *FEMS Microbiology Letters*, **2020**, 367,	2.9	42
60	Sources of microbial oils with emphasis to Mortierella (Umbelopsis) isabellina fungus. *World Journal of Microbiology and Biotechnology*, **2019**, 35, 63	4.4	37
59	A mathematical model for the study of lipid accumulation in oleaginous microorganisms. I. Lipid accumulation during growth of Mucor circinelloides CBS 172-27 on a vegetable oil. *Grasas Y Aceites*, **1995**, 46, 169-1873	1.3	37

58	Impact of anaerobiosis strategy and bioreactor geometry on the biochemical response of Clostridium butyricum VPI 1718 during 1,3-propanediol fermentation. *Bioresource Technology*, **2011**, 102, 10625-32	11	36
57	Lipid production and characterization by Mortierella (Umbelopsis) isabellina cultivated on lignocellulosic sugars. *Journal of Applied Microbiology*, **2017**, 123, 1461-1477	4.7	35
56	Patterns of major metabolites biosynthesis by different mushroom fungi grown on glucose-based submerged cultures. *Bioprocess and Biosystems Engineering*, **2014**, 37, 1385-400	3.7	33
55	Grape skins as a natural support for yeast immobilization. *Biotechnology Letters*, **2002**, 24, 1331-1335	3	32
54	Biomodification of fats and oils and scenarios of adding value on renewable fatty materials through microbial fermentations: Modelling and trials with Yarrowia lipolytica. *Journal of Cleaner Production*, **2018**, 200, 1111-1129	10.3	31
53	Lipid production by the filamentous cyanobacterium Limnothrix sp. growing in synthetic wastewater in suspended- and attached-growth photobioreactor systems. *Annals of Microbiology*, **2015**, 65, 1941-1948	3.2	30
52	Mushroom polysaccharides and lipids synthesized in liquid agitated and static cultures. Part II: study of Volvariella volvacea. *Applied Biochemistry and Biotechnology*, **2012**, 167, 1890-906	3.2	30
51	Feasibility of raw glycerol conversion into single cell oil by zygomycetes under non-aseptic conditions. *Biotechnology and Bioengineering*, **2015**, 112, 827-31	4.9	29
50	A Leptolyngbya-based microbial consortium for agro-industrial wastewaters treatment and biodiesel production. *Environmental Science and Pollution Research*, **2018**, 25, 17957-17966	5.1	28
49	Fish farm effluents are suitable growth media for , a polyunsaturated fatty acid producing microalga. *Engineering in Life Sciences*, **2018**, 18, 851-860	3.4	27
48	Screening of oleaginous yeasts for lipid production using volatile fatty acids as substrate. *Biomass and Bioenergy*, **2020**, 138, 105553	5.3	25
47	Treatment of second cheese whey effluents using a Choricystis-based system with simultaneous lipid production. *Journal of Chemical Technology and Biotechnology*, **2016**, 91, 2349-2359	3.5	25
46	Newly isolated yeasts from Tunisian microhabitats: Lipid accumulation and fatty acid composition. *Engineering in Life Sciences*, **2017**, 17, 226-236	3.4	24
45	Effect of aqueous extracts of some plants of Lamiaceae family on the growth of Yarrowia lipolytica. *International Journal of Food Microbiology*, **2001**, 64, 175-81	5.8	24
44	Modelling of simultaneous production of polygalacturonase and exopolysaccharide by Aureobasidium pullulans ATHUM 2915. *Antonie Van Leeuwenhoek*, **1998**, 73, 155-62	2.1	23
43	Mycelial fatty acid composition of Pleurotus spp. and its application in the intrageneric differentiation. *Mycological Research*, **2002**, 106, 925-929		23
42	Production of polyunsaturated single cell oils possessing antimicrobial and anticancer properties. *Annals of Microbiology*, **2016**, 66, 937-948	3.2	22
41	Mushroom polysaccharides and lipids synthesized in liquid agitated and static cultures. Part I: screening various mushroom species. *Applied Biochemistry and Biotechnology*, **2012**, 167, 536-51	3.2	22

40	Lignocellulosic Biomass as a Substrate for Oleaginous Microorganisms: A Review. *Applied Sciences (Switzerland)*, **2020**, 10, 7698	2.6	21
39	Modeling growth and biochemical activities of Azospirillum spp. *Applied Microbiology and Biotechnology*, **2002**, 58, 352-7	5.7	20
38	A mathematical model for the study of lipid accumulation in oleaginous microorganisms. II. Study of cellular lipids of Mucor circinelloides during growth on a vegetable oil. *Grasas Y Aceites*, **1995**, 46, 245-250	1.3	20
37	Lipid accumulation in the new oleaginous yeast Debaryomyces etchellsii correlates with ascosporogenesis. *Biomass and Bioenergy*, **2015**, 80, 307-315	5.3	18
36	Importance of the methyl-citrate cycle on glycerol metabolism in the yeast Yarrowia lipolytica. *Journal of Biotechnology*, **2013**, 168, 303-14	3.7	18
35	Two alternative pathways for substrate assimilation byMucor circinelloides. *Folia Microbiologica*, **1996**, 41, 254-256	2.8	17
34	Agroindustrial Wastewater Treatment with Simultaneous Biodiesel Production in Attached Growth Systems Using a Mixed Microbial Culture. *Water (Switzerland)*, **2018**, 10, 1693	3	17
33	Fatty acid lithium salts fromCunninghamella echinulatahave cytotoxic and genotoxic effects on HL-60 human leukemia cells. *Engineering in Life Sciences*, **2015**, 15, 243-253	3.4	16
32	Effect of a Teucrium polium L. extract on the growth and fatty acid composition of Saccharomyces cerevisiae and Yarrowia lipolytica. *Antonie Van Leeuwenhoek*, **1998**, 73, 195-8	2.1	16
31	High-added value products from microalgae and prospects of aquaculture wastewaters as microalgae growth media. *FEMS Microbiology Letters*, **2020**, 367,	2.9	15
30	Adaptation of Volvariella volvacea metabolism in high carbon to nitrogen ratio media. *Food Chemistry*, **2016**, 196, 272-80	8.5	15
29	Studies on bacteriocin (thermophilin T) production by Streptococcus thermophilus ACA-DC 0040 in batch and fed-batch fermentation modes. *Antonie Van Leeuwenhoek*, **2007**, 92, 207-20	2.1	15
28	Composition of lipids produced by some strains ofCandida species. Production of single-cell oil in a chemostat culture. *Folia Microbiologica*, **1996**, 41, 299-302	2.8	15
27	Improving Fatty Acid Composition of Lipids Synthesized by Brachionus plicatilis in Large Scale Experiments. *JAOCS, Journal of the American Oil ChemistskSociety*, **2012**, 89, 2047-2055	1.8	14
26	A novel modelling approach for predicting microbial growth in a raw cured meat product stored at 3 degrees C and at 12 degrees C in air. *International Journal of Food Microbiology*, **1998**, 43, 39-52	5.8	13
25	Adaptation dynamics of Clostridium butyricum in high 1,3-propanediol content media. *Applied Microbiology and Biotechnology*, **2012**, 95, 1541-52	5.7	12
24	Characterization of olive fruit microflora and its effect on olive oil volatile compounds biogenesis. *European Journal of Lipid Science and Technology*, **2010**, 112, 1024-1032	3	12
23	Newly isolated bacterial strains belonging to Bacillaceae (Bacillus sp.) and Micrococcaceae accelerate death of the honey bee mite, Varroa destructor (V. jacobsoni), in laboratory assays. *Biotechnology Letters*, **2004**, 26, 529-32	3	12

22	Metabolic activities in Azospirillum lipoferum grown in the presence of NH4+. *Applied Microbiology and Biotechnology*, **2003**, 62, 574-8	5.7	12
21	Prey–predator dynamics with predator switching regulated by a catabolic repression control mode. *Ecological Modelling*, **2005**, 183, 451-462	3	12
20	Adaptive laboratory evolution principles and applications in industrial biotechnology. *Biotechnology Advances*, **2021**, 54, 107795	17.8	12
19	Utilization of Biomass Derived from Cyanobacteria-Based Agro-Industrial Wastewater Treatment and Raisin Residue Extract for Bioethanol Production. *Water (Switzerland)*, **2021**, 13, 486	3	12
18	Modeling of oleaginous fungal biofilm developed on semi-solid media. *Bioresource Technology*, **2011**, 102, 9697-704	11	11
17	Biotreatment of Poultry Waste Coupled with Biodiesel Production Using Suspended and Attached Growth Microalgal-Based Systems. *Sustainability*, **2020**, 12, 5024	3.6	10
16	Fatty acid biosynthesis during the life cycle of Debaryomyces etchellsii. *Microbiology (United Kingdom)*, **2016**, 162, 1080-1090	2.9	8
15	Patterns of Lignocellulosic Sugar Assimilation and Lipid Production by Newly Isolated Yeast Strains From Chilean Valdivian Forest. *Applied Biochemistry and Biotechnology*, **2020**, 192, 1124-1146	3.2	8
14	Enzymatic Synthesis of Glucose Fatty Acid Esters Using SCOs as Acyl Group-Donors and Their Biological Activities. *Applied Sciences (Switzerland)*, **2021**, 11, 2700	2.6	8
13	Dynamics of free-living nitrogen-fixing bacterial populations in antagonistic conditions. *Ecological Modelling*, **2007**, 200, 243-253	3	7
12	Susceptibility to peroxidation of the major mycelial lipids of Cunninghamella echinulata. *European Journal of Lipid Science and Technology*, **2008**, 110, 1062-1067	3	7
11	Growth of Candida boidinii in a methanol-limited continuous culture and the formation of methanol-degrading enzymes. *Journal of Biotechnology*, **1999**, 72, 127-139	3.7	7
10	Specificity of Mucor miehei lipase on methyl ester substrates. *Grasas Y Aceites*, **1993**, 44, 331-334	1.3	7
9	Bacterial diversity of the outflows of a Polichnitos (Lesvos, Greece) hot spring, laboratory studies of a Cyanobacterium sp. strain and potential medical applications. *Annals of Microbiology*, **2017**, 67, 643-654	2.2	6
8	Dynamics of a two-prey–one-predator system with predator switching regulated by a catabolic repression control-like mode. *Ecological Modelling*, **2005**, 186, 345-357	3	6
7	Data on cellular lipids of grown on fatty substrates. *Data in Brief*, **2018**, 21, 1037-1044	1.2	6
6	Growth of Candida boidinii on methanol and the activity of methanol-degrading enzymes as affected from formaldehyde and methylformate. *Journal of Biotechnology*, **2000**, 80, 119-25	3.7	5
5	Growth dynamics of Azospirillum lipoferum at steady and transitory states in the presence of NH. *Journal of Applied Microbiology*, **2006**, 100, 286-95	4.7	4

4	Single Cell Oil (SCO)-Based Bioactive Compounds: I-Enzymatic Synthesis of Fatty Acid Amides Using SCOs as Acyl Group Donors and Their Biological Activities. *Applied Biochemistry and Biotechnology*, **2021**, 193, 822-845	3.2	4
3	Dynamics of free-living nitrogen-fixing bacterial populations and nitrogen fixation in a two-prey one-predator system. *Ecological Modelling*, **2008**, 218, 323-338	3	1
2	Bioconversion of pomegranate residues into biofuels and bioactive lipids. *Journal of Cleaner Production*, **2021**, 323, 129193	10.3	1
1	Sustainable arabitol production by a newly isolated Debaryomyces prosopidis strain cultivated on biodiesel-derived glycerol. *Carbon Resources Conversion*, **2022**, 5, 92-99	4.7	1