

# Ayelet Fishman

## List of Publications by Year in descending order

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74  
papers

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147566  
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168136  
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g-index

77  
all docs

77  
docs citations

77  
times ranked

3303  
citing authors

#	ARTICLE	IF	CITATIONS
1	Yeast-derived potato patatins: Biochemical and biophysical characterization. Food Chemistry, 2022, 370, 130984.	4.2	3
2	The Structure of Bilirubin Oxidase from Bacillus pumilus Reveals a Unique Disulfide Bond for Site-Specific Direct Electron Transfer. Biosensors, 2022, 12, 258.	2.3	0
3	The maternal foam plug constitutes a reservoir for the desert locust's bacterial symbionts. Environmental Microbiology, 2021, 23, 2461-2472.	1.8	3
4	Enzymatic and chemical modification of zein for food application. Trends in Food Science and Technology, 2021, 112, 507-517.	7.8	42
5	Ureolytic bacteria from electronic waste area, their biological robustness against potentially toxic elements and underlying mechanisms. Journal of Environmental Management, 2021, 289, 112517.	3.8	27
6	Immobilization of aldehyde dehydrogenase on montmorillonite using polyethyleneimine as a stabilization and bridging agent. Applied Clay Science, 2021, 212, 106216.	2.6	5
7	Bridges to Stability: Engineering Disulfide Bonds Towards Enhanced Lipase Biodiesel Synthesis. ChemCatChem, 2020, 12, 181-192.	1.8	13
8	Effect of Maternal Diet and Milk Lipid Composition on the Infant Gut and Maternal Milk Microbiomes. Nutrients, 2020, 12, 2539.	1.7	23
9	The COP9 signalosome mediates the Spt23 regulated fatty acid desaturation and ergosterol biosynthesis. FASEB Journal, 2020, 34, 4870-4889.	0.2	10
10	Transglutaminase modifies the physical stability and digestibility of chickpea protein-stabilized oil-in-water emulsions. Food Chemistry, 2020, 315, 126301.	4.2	61
11	A coupled enzymatic reaction of tyrosinase and glucose dehydrogenase for the production of hydroxytyrosol. Applied Microbiology and Biotechnology, 2020, 104, 4945-4955.	1.7	15
12	Tyrosinase-crosslinked pea protein emulsions: Impact of zein incorporation. Food Research International, 2019, 116, 370-378.	2.9	30
13	Exploiting the 1-(4-fluorobenzyl)piperazine fragment for the development of novel tyrosinase inhibitors as anti-melanogenic agents: Design, synthesis, structural insights and biological profile. European Journal of Medicinal Chemistry, 2019, 178, 380-389.	2.6	57
14	Impact of fatty acids unsaturation on stability and intestinal lipolysis of bioactive lipid droplets. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 561, 70-78.	2.3	15
15	Partial characterization of bean and maize root peroxidases and their ability to crosslink potato protein. Archives of Biological Sciences, 2019, 71, 293-303.	0.2	4
16	Targeting Tyrosinase: Development and Structural Insights of Novel Inhibitors Bearing Arylpiperidine and Arylpiperazine Fragments. Journal of Medicinal Chemistry, 2018, 61, 3908-3917.	2.9	25
17	Crosslinking of food proteins mediated by oxidative enzymes – A review. Trends in Food Science and Technology, 2018, 72, 134-143.	7.8	90
18	Altering 2-Hydroxybiphenyl 3-Monooxygenase Regioselectivity by Protein Engineering for the Production of a New Antioxidant. ChemBioChem, 2018, 19, 583-590.	1.3	8

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19	Gel-like emulsions stabilized by tyrosinase-crosslinked potato and zein proteins. <i>Food Hydrocolloids</i> , 2018, 82, 53-63.	5.6	65
20	Versatile Fungal Polyphenol Oxidase with Chlorophenol Bioremediation Potential: Characterization and Protein Engineering. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	1.4	15
21	Filling the Void: Introducing Aromatic Interactions into Solvent Tunnels To Enhance Lipase Stability in Methanol. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	1.4	19
22	Mechanistic insights into tyrosinase-mediated crosslinking of soy glycinin derived peptides. <i>Food Chemistry</i> , 2017, 232, 587-594.	4.2	16
23	Oil-in-water emulsions stabilized by tyrosinase-crosslinked potato protein. <i>Food Research International</i> , 2017, 100, 407-415.	2.9	25
24	Constitutive expression of active microbial transglutaminase in <i>Escherichia coli</i> and comparative characterization to a known variant. <i>BMC Biotechnology</i> , 2017, 17, 23.	1.7	22
25	Chemical exploration of 4-(4-fluorobenzyl)piperidine fragment for the development of new tyrosinase inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2017, 125, 992-1001.	2.6	38
26	Modulating the gel properties of soy glycinin by crosslinking with tyrosinase. <i>Food Research International</i> , 2016, 87, 42-49.	2.9	24
27	The unravelling of the complex pattern of tyrosinase inhibition. <i>Scientific Reports</i> , 2016, 6, 34993.	1.6	109
28	Creating an Efficient Methanol-Stable Biocatalyst by Protein and Immobilization Engineering Steps towards Efficient Biosynthesis of Biodiesel. <i>ChemSusChem</i> , 2016, 9, 3161-3170.	3.6	27
29	Structure-function correlations in tyrosinases. <i>Protein Science</i> , 2015, 24, 1360-1369.	3.1	158
30	Structural insights into methanol-stable variants of lipase T6 from <i>Geobacillus stearothermophilus</i> . <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 9449-9461.	1.7	27
31	The antioxidant hydroxytyrosol: biotechnological production challenges and opportunities. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 1119-1130.	1.7	46
32	Atomic Picture of Ligand Migration in Toluene 4-Monooxygenase. <i>Journal of Physical Chemistry B</i> , 2015, 119, 671-678.	1.2	8
33	Antimicrobial packaging based on linear low-density polyethylene compounded with potassium sorbate. <i>LWT - Food Science and Technology</i> , 2015, 62, 278-286.	2.5	32
34	A crystal structure of 2-hydroxybiphenyl 3-monooxygenase with bound substrate provides insights into the enzymatic mechanism. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2015, 1854, 1906-1913.	1.1	19
35	Variation in quantity and composition of cuticular hydrocarbons in the scorpion <i>Buthus occitanus</i> (Buthidae) in response to acute exposure to desiccation stress. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2015, 182, 58-63.	0.8	25
36	Characterization of oil-in-water emulsions stabilized by tyrosinase-crosslinked soy glycinin. <i>Food Hydrocolloids</i> , 2015, 43, 493-500.	5.6	26

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37	Protein Engineering by Random Mutagenesis and Structure-Guided Consensus of <i>Geobacillus stearothermophilus</i> Lipase T6 for Enhanced Stability in Methanol. <i>Applied and Environmental Microbiology</i> , 2014, 80, 1515-1527.	1.4	111
38	Modulating enzyme activity using ionic liquids or surfactants. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 545-554.	1.7	49
39	Directed evolution of nitrobenzene dioxygenase for the synthesis of the antioxidant hydroxytyrosol. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 4975-4985.	1.7	19
40	Determination of tyrosinase substrate-binding modes reveals mechanistic differences between type-3 copper proteins. <i>Nature Communications</i> , 2014, 5, 4505.	5.8	164
41	Cloning Rosa hybrid phenylacetaldehyde synthase for the production of 2-phenylethanol in a whole cell <i>Escherichia coli</i> system. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 3603-3611.	1.7	35
42	The mechanism of copper uptake by tyrosinase from <i>Bacillus megaterium</i> . <i>Journal of Biological Inorganic Chemistry</i> , 2013, 18, 895-903.	1.1	34
43	Influencing the monophenolase/diphenolase activity ratio in tyrosinase. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2013, 1834, 629-633.	1.1	64
44	Changes in tyrosinase specificity by ionic liquids and sodium dodecyl sulfate. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 1953-1961.	1.7	34
45	Protein engineering of nitrobenzene dioxygenase for enantioselective synthesis of chiral sulfoxides. <i>Protein Engineering, Design and Selection</i> , 2013, 26, 335-345.	1.0	14
46	ENGINEERING NON-HEME MONO- AND DIOXYGENASES FOR BIOCATALYSIS. <i>Computational and Structural Biotechnology Journal</i> , 2012, 2, e201209011.	1.9	10
47	Improving process conditions of hydroxytyrosol synthesis by toluene-4-monooxygenase. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012, 84, 121-127.	1.8	16
48	First Structures of an Active Bacterial Tyrosinase Reveal Copper Plasticity. <i>Journal of Molecular Biology</i> , 2011, 405, 227-237.	2.0	230
49	Hydrophobic microspheres for <i>in situ</i> removal of 2-phenylethanol from yeast fermentation. <i>Journal of Microencapsulation</i> , 2011, 28, 628-638.	1.2	16
50	The influence of key residues in the tunnel entrance and the active site on activity and selectivity of toluene-4-monooxygenase. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010, 66, 72-80.	1.8	25
51	Directed evolution of tyrosinase for enhanced monophenolase/diphenolase activity ratio. <i>Enzyme and Microbial Technology</i> , 2010, 47, 372-376.	1.6	55
52	Crystallization and preliminary X-ray crystallographic analysis of a bacterial tyrosinase from <i>Bacillus megaterium</i> . <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2010, 66, 1101-1103.	0.7	26
53	Improving Biocatalyst Performance by Integrating Statistical Methods into Protein Engineering. <i>Applied and Environmental Microbiology</i> , 2010, 76, 6397-6403.	1.4	28
54	Bioproduction of 2-Phenylethanol in a Biphasic Ionic Liquid Aqueous System. <i>Journal of Agricultural and Food Chemistry</i> , 2010, 58, 2260-2265.	2.4	93

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55	Rapid Methods for High-Throughput Detection of Sulfoxides. Applied and Environmental Microbiology, 2009, 75, 4711-4719.	1.4	8
56	Production of 2-phenylethanol from L-phenylalanine by a stress tolerant <i>Saccharomyces cerevisiae</i> strain. Journal of Applied Microbiology, 2009, 106, 534-542.	1.4	99
57	Protein engineering of toluene monooxygenases for synthesis of hydroxytyrosol. Food Chemistry, 2009, 116, 114-121.	4.2	29
58	Isolation, Cloning and Characterization of a Tyrosinase with Improved Activity in Organic Solvents from <i>Bacillus megaterium</i> . Journal of Molecular Microbiology and Biotechnology, 2009, 17, 188-200.	1.0	78
59	Improvement of natural isolates of <i>Saccharomyces cerevisiae</i> strains for synthesis of a chiral building block using classic genetics. Applied Microbiology and Biotechnology, 2008, 78, 659-667.	1.7	7
60	Protein Engineering of Toluene Monooxygenases for Synthesis of Chiral Sulfoxides. Applied and Environmental Microbiology, 2008, 74, 1555-1566.	1.4	41
61	Controlling the Regiospecific Oxidation of Aromatics via Active Site Engineering of Toluene para-Monooxygenase of <i>Ralstonia pickettii</i> PKO1. Journal of Biological Chemistry, 2005, 280, 506-514.	1.6	68
62	Oxidation of Benzene to Phenol, Catechol, and 1,2,3-Trihydroxybenzene by Toluene 4-Monooxygenase of <i>Pseudomonas mendocina</i> KR1 and Toluene 3-Monooxygenase of <i>Ralstonia pickettii</i> PKO1. Applied and Environmental Microbiology, 2004, 70, 3814-3820.	1.4	122
63	Toluene 3-Monooxygenase of <i>Ralstonia pickettii</i> PKO1 Is a para-Hydroxylating Enzyme. Journal of Bacteriology, 2004, 186, 3117-3123.	1.0	63
64	Altering Toluene 4-Monooxygenase by Active-Site Engineering for the Synthesis of 3-Methoxycatechol, Methoxyhydroquinone, and Methylhydroquinone. Journal of Bacteriology, 2004, 186, 4705-4713.	1.0	76
65	Saturation Mutagenesis of Toluene ortho-Monooxygenase of <i>Burkholderia cepacia</i> G4 for Enhanced 1-Naphthol Synthesis and Chloroform Degradation. Applied and Environmental Microbiology, 2004, 70, 3246-3252.	1.4	75
66	Protein engineering of toluene 4-monooxygenase of <i>Pseudomonas mendocina</i> KR1 for synthesizing 4-nitrocatechol from nitrobenzene. Biotechnology and Bioengineering, 2004, 87, 779-790.	1.7	48
67	Physiological relevance of successive hydroxylations of toluene by toluene para-monooxygenase of <i>Ralstonia pickettii</i> PKO1. Biocatalysis and Biotransformation, 2004, 22, 283-289.	1.1	8
68	Bio-imprinting of lipases with fatty acids. Journal of Molecular Catalysis B: Enzymatic, 2003, 22, 193-202.	1.8	54
69	Stabilization of horseradish peroxidase in aqueous-organic media by immobilization onto cellulose using a cellulose-binding-domain. Journal of Molecular Catalysis B: Enzymatic, 2002, 18, 121-131.	1.8	58
70	A two-step enzymatic resolution process for large-scale production of (S)- and (R)-ethyl-3-hydroxybutyrate. Biotechnology and Bioengineering, 2001, 74, 256-263.	1.7	34
71	Kinetic resolution of a diltiazem intermediate by lipase-catalyzed enantioselective alcoholysis. Journal of Molecular Catalysis B: Enzymatic, 2000, 9, 251-257.	1.8	0
72	Practical Chemo-Enzymatic Process for the Preparation of (1R,cis)-2-(2,2-Dihaloethenyl)-3,3-dimethylcyclopropane Carboxylic Acids. Organic Process Research and Development, 2000, 4, 77-87.	1.3	8

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73	Fatty-acid-modified enzymes as enantioselective catalysts in microaqueous organic media. <i>Biotechnology Letters</i> , 1998, 20, 535-538.	1.1	10
74	Chemo-enzymatic synthesis of (S)-1±-cyano-3-phenoxybenzyl alcohol. <i>Tetrahedron: Asymmetry</i> , 1998, 9, 107-118.	1.8	32