

# Yana Y Toporkova

## List of Publications by Year in descending order

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Version: 2024-02-01

26  
papers

331  
citations

759233

12  
h-index

839539

18  
g-index

27  
all docs

27  
docs citations

27  
times ranked

174  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tomato CYP74C3 is a Multifunctional Enzyme not only Synthesizing Allene Oxide but also Catalyzing its Hydrolysis and Cyclization. <i>ChemBioChem</i> , 2008, 9, 2498-2505.	2.6	42
2	Determinants governing the CYP74 catalysis: Conversion of allene oxide synthase into hydroperoxide lyase by site-directed mutagenesis. <i>FEBS Letters</i> , 2008, 582, 3423-3428.	2.8	39
3	Structure-function relationship in the CYP74 family: Conversion of divinyl ether synthases into allene oxide synthases by site-directed mutagenesis. <i>FEBS Letters</i> , 2013, 587, 2552-2558.	2.8	24
4	Green leaf divinyl ether synthase: Gene detection, molecular cloning and identification of a unique CYP74B subfamily member. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2012, 1821, 287-294.	2.4	22
5	Epoxyalcohol synthase of <i>Ectocarpus siliculosus</i> . First CYP74-related enzyme of oxylipin biosynthesis in brown algae. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2017, 1862, 167-175.	2.4	19
6	Double function hydroperoxide lyases/epoxyalcohol synthases (CYP74C) of higher plants: identification and conversion into allene oxide synthases by site-directed mutagenesis. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2018, 1863, 369-378.	2.4	18
7	Identification of CYP443D1 (CYP74 clan) of <i>Nematostella vectensis</i> as a first cnidarian epoxyalcohol synthase and insights into its catalytic mechanism. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2017, 1862, 1099-1109.	2.4	16
8	Oxylipin biosynthesis in spikemoss <i>Selaginella moellendorffii</i> : Molecular cloning and identification of divinyl ether synthases CYP74M1 and CYP74M3. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2016, 1861, 301-309.	2.4	15
9	NMR structure, conformational dynamics, and biological activity of Ps Def1 defensin from <i>Pinus sylvestris</i> . <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017, 1865, 1085-1094.	2.3	15
10	Structure of Scots pine defensin 1 by spectroscopic methods and computational modeling. <i>International Journal of Biological Macromolecules</i> , 2016, 84, 142-152.	7.5	13
11	Detection of the first higher plant epoxyalcohol synthase: Molecular cloning and characterisation of the CYP74M2 enzyme of spikemoss <i>Selaginella moellendorffii</i> . <i>Phytochemistry</i> , 2018, 156, 73-82.	2.9	13
12	Differential modulation of the lipoxygenase cascade during typical and latent <i>Pectobacterium atrosepticum</i> infections. <i>Annals of Botany</i> , 2022, 129, 271-286.	2.9	12
13	Stereospecific biosynthesis of (9S,13S)-10-oxo-phytoenoic acid in young maize roots. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2015, 1851, 1262-1270.	2.4	11
14	Epoxyalcohol synthase activity of the CYP74B enzymes of higher plants. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2020, 1865, 158743.	2.4	10
15	Novel Allene Oxide Synthase Products Formed via Favorskii-Type Rearrangement: Mechanistic Implications for 12-Oxo-10,15-phytodienoic Acid Biosynthesis. <i>ChemBioChem</i> , 2011, 12, 2511-2517.	2.6	9
16	Detection and molecular cloning of CYP74Q1 gene: Identification of <i>Ranunculus acris</i> leaf divinyl ether synthase. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2014, 1841, 1227-1233.	2.4	9
17	Catalysis by allene oxide synthases (CYP74A and CYP74C): Alterations by the Phe/Leu mutation at the SRS-1 region. <i>Phytochemistry</i> , 2020, 169, 112152.	2.9	9
18	Detection of unprecedented allene oxide synthase member of CYP74B subfamily: CYP74B33 of carrot ( <i>Daucus carota</i> ). <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2019, 1864, 1580-1590.	2.4	7

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19	The CYP74B and CYP74D divinyl ether synthases possess a side hydroperoxide lyase and epoxyalcohol synthase activities that are enhanced by the site-directed mutagenesis. <i>Phytochemistry</i> , 2020, 179, 112512.	2.9	7
20	Antimicrobial Activity of Geometric Isomers of Etherolenic Acid—the Products of Plant Lipoxygenase Cascade. <i>Doklady Biochemistry and Biophysics</i> , 2018, 480, 139-142.	0.9	5
21	Gene Expression Analysis of Potato ( <i>Solanum tuberosum</i> L.) Lipoxygenase Cascade and Oxylipin Signature under Abiotic Stress. <i>Plants</i> , 2022, 11, 683.	3.5	5
22	Detection of the First Epoxyalcohol Synthase/Allene Oxide Synthase (CYP74 Clan) in the Lancelet ( <i>Branchiostoma belcheri</i> , Chordata). <i>International Journal of Molecular Sciences</i> , 2021, 22, 4737.	4.1	4
23	Lipoxygenase pathway in brown algae: The biosynthesis of novel oxylipins —ectocarpins™ by hydroperoxide bicyclase CYP5164A3 of <i>Ectocarpus siliculosus</i> . <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2022, 1867, 159205.	2.4	3
24	Detection of divinyl ether synthase CYP74H2 biosynthesizing (11Z)-etheroleic and (1E1Z)-colnelenic acids in asparagus ( <i>Asparagus officinalis</i> L.). <i>Phytochemistry</i> , 2022, 200, 113212.	2.9	2
25	Hydroperoxide bicyclase CYP50918A1 of <i>Plasmodiophora brassicae</i> (Rhizaria, SAR): Detection of novel enzyme of oxylipin biosynthesis. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2021, 1866, 159042.	2.4	1
26	Oxylipin biosynthesis in spikemoss <i>Selaginella moellendorffii</i> : Identification of allene oxide synthase (CYP74L2) and hydroperoxide lyase (CYP74L1). <i>Phytochemistry</i> , 2022, 195, 113051.	2.9	1