Diane E Kelly

List of Publications by Year
in descending order

71 papers	4,540 citations	87888 38 h-index	106344 65 g-index
72 all docs	72 docs citations	72 times ranked	4076 citing authors

#	Article	IF	Citations
1	Multiple Molecular Mechanisms Contribute to a Stepwise Development of Fluconazole Resistance in Clinical <i>Candida albicans</i> Strains. Antimicrobial Agents and Chemotherapy, 1998, 42, 3065-3072.	3.2	326
2	Azole fungicidesÂ-Âunderstanding resistance mechanisms in agricultural fungal pathogens. Pest Management Science, 2015, 71, 1054-1058.	3.4	214
3	The Mutation T315A in Candida albicans Sterol 14Î±-Demethylase Causes Reduced Enzyme Activity and Fluconazole Resistance through Reduced Affinity. Journal of Biological Chemistry, 1997, 272, 5682-5688.	3.4	183
4	Microbial cytochromes P450: biodiversity and biotechnology. Where do cytochromes P450 come from, what do they do and what can they do for us?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120476.	4.0	180
5	A Clinical Isolate of <i>Candida albicans</i> with Mutations in <i>ERG11</i> (Encoding Sterol) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Amphotericin B. Antimicrobial Agents and Chemotherapy, 2010, 54, 3578-3583.	3.2	152
6	Identification and Characterization of Four Azole-Resistant <i>erg3</i> Mutants of <i>Candida albicans</i>. Antimicrobial Agents and Chemotherapy, 2010, 54, 4527-4533.	3.2	150
7	Resistance to antifungals that target CYP51. Journal of Chemical Biology, 2014, 7, 143-161.	2.2	146
8	The Mechanism of the Acyl-Carbon Bond Cleavage Reaction Catalyzed by Recombinant Sterol 14Î±-Demethylase of Candida albicans (Other Names Are: Lanosterol 14Î±-Demethylase, P-45014DM, and) Tj ETQq0 0 0 rgBT /Overlock 1	3.4	136
9	Resistance to fluconazole and amphotericin in Candida albicans from AIDS patients. Lancet, The, 1996, 348, 1523-1524.	13.7	135
10	Characterization of Saccharomyces cerevisiae CYP61, Sterol Î”22-Desaturase, and Inhibition by Azole Antifungal Agents. Journal of Biological Chemistry, 1997, 272, 9986-9988.	3.4	126
11	Azole Affinity of Sterol 14Î±-Demethylase (CYP51) Enzymes from Candida albicans and Homo sapiens. Antimicrobial Agents and Chemotherapy, 2013, 57, 1352-1360.	3.2	120
12	The R467K Amino Acid Substitution in <i>Candida albicans</i> Sterol 14Î±-Demethylase Causes Drug Resistance through Reduced Affinity. Antimicrobial Agents and Chemotherapy, 2000, 44, 63-67.	3.2	117
13	The Cytochrome P450 Complement (CYPome) of Streptomyces coelicolor A3(2). Journal of Biological Chemistry, 2002, 277, 24000-24005.	3.4	117
14	The G464S Amino Acid Substitution in Candida albicans Sterol 14Î±-Demethylase Causes Fluconazole Resistance in the Clinic through Reduced Affinity. Biochemical and Biophysical Research Communications, 1999, 262, 174-179.	2.1	111
15	Impact of Recently Emerged Sterol 14Î±-Demethylase (CYP51) Variants of Mycosphaerella graminicola on Azole Fungicide Sensitivity. Applied and Environmental Microbiology, 2011, 77, 3830-3837.	3.1	107
16	Y132H substitution inCandida albicanssterol 14ÃŽÂ±-demethylase confers fluconazole resistance by preventing binding to haem. FEMS Microbiology Letters, 1999, 180, 171-175.	1.8	98
17	Azole Binding Properties of <i>Candida albicans</i> Sterol 14-Î± Demethylase (CaCYP51). Antimicrobial Agents and Chemotherapy, 2010, 54, 4235-4245.	3.2	97
18	Facultative Sterol Uptake in an Ergosterol-Deficient Clinical Isolate of Candida glabrata Harboring a Missense Mutation in <i>ERG11</i> and Exhibiting Cross-Resistance to Azoles and Amphotericin B. Antimicrobial Agents and Chemotherapy, 2012, 56, 4223-4232.	3.2	90

#	ARTICLE	IF	CITATIONS
19	Paralog Re-Emergence: A Novel, Historically Contingent Mechanism in the Evolution of Antimicrobial Resistance. Molecular Biology and Evolution, 2014, 31, 1793-1802.	8.9	89
20	Molecular aspects of azole antifungal action and resistance. Drug Resistance Updates, 1999, 2, 390-402.	14.4	86
21	The CYPome (Cytochrome P450 complement) of Aspergillus nidulans. Fungal Genetics and Biology, 2009, 46, S53-S61.	2.1	78
22	Molecular Modelling of the Emergence of Azole Resistance in Mycosphaerella graminicola. PLoS ONE, 2011, 6, e20973.	2.5	74
23	Expression, Purification, and Characterization of Aspergillus fumigatus Sterol 14-Î± Demethylase (CYP51) Isoenzymes A and B. Antimicrobial Agents and Chemotherapy, 2010, 54, 4225-4234.	3.2	73
24	Prothioconazole and Prothioconazole-Desthio Activities against Candida albicans Sterol 14-Î±-Demethylase. Applied and Environmental Microbiology, 2013, 79, 1639-1645.	3.1	73
25	Characteristics of the heterologously expressed human lanosterol 14Î±-demethylase (other names:) Tj ETQq1 1 0.784314 rgBT /Overlo antifungal agents. , 1999, 15, 755-763.		72
26	Purification and reconstitution of activity ofSaccharomyces cerevisiaeP450 61, a sterolÎ"22-desaturase. FEBS Letters, 1995, 377, 217-220.	2.8	68
27	Mechanism of Binding of Prothioconazole to <i>Mycosphaerella graminicola</i> CYP51 Differs from That of Other Azole Antifungals. Applied and Environmental Microbiology, 2011, 77, 1460-1465.	3.1	62
28	Two Clinical Isolates of Candida glabrata Exhibiting Reduced Sensitivity to Amphotericin B Both Harbor Mutations in <i>ERG2</i>. Antimicrobial Agents and Chemotherapy, 2012, 56, 6417-6421.	3.2	62
29	Molecular diversity of sterol 14Î±-demethylase substrates in plants, fungi and humans. FEBS Letters, 1998, 425, 263-265.	2.8	60
30	<i>In Vitro</i> and <i>In Vivo</i> Antifungal Profile of a Novel and Long-Acting Inhaled Azole, PC945, on Aspergillus fumigatus Infection. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	60
31	The biodiversity of microbial cytochromes P450. Advances in Microbial Physiology, 2003, 47, 131-186.	2.4	58
32	The N-Terminal Membrane Domain of Yeast NADPH-Cytochrome P450 (CYP) Oxidoreductase Is Not Required for Catalytic Activity in Sterol Biosynthesis or in Reconstitution of CYP Activity. Journal of Biological Chemistry, 1998, 273, 4492-4496.	3.4	57
33	The Investigational Drug VT-1129 Is a Highly Potent Inhibitor of Cryptococcus Species CYP51 but Only Weakly Inhibits the Human Enzyme. Antimicrobial Agents and Chemotherapy, 2016, 60, 4530-4538.	3.2	57
34	Bactericidal and inhibitory effects of azole antifungal compounds onMycobacterium smegmatis. FEMS Microbiology Letters, 2000, 192, 159-162.	1.8	55
35	Generation of a Complete, Soluble, and Catalytically Active Sterol 14Î±-Demethylaseâˆ'Reductase Complex. Biochemistry, 1999, 38, 8733-8738.	2.5	54
36	Differential inhibition of human CYP3A4 and Candida albicans CYP51 with azole antifungal agents. Chemico-Biological Interactions, 2000, 125, 165-175.	4.0	52

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37	Complementation of a <i>Saccharomyces cerevisiae</i> ERG11/CYP51 (Sterol 14Î±-Demethylase) Doxycycline-Regulated Mutant and Screening of the Azole Sensitivity of <i>Aspergillus fumigatus</i> Isoenzymes CYP51A and CYP51B. Antimicrobial Agents and Chemotherapy, 2010, 54, 4920-4923.	3.2	43
38	Activities and Kinetic Mechanisms of Native and Soluble NADPHâ€“Cytochrome P450 Reductase. Biochemical and Biophysical Research Communications, 2001, 286, 48-54.	2.1	41
39	Clotrimazole as a Potent Agent for Treating the Oomycete Fish Pathogen Saprolegnia parasitica through Inhibition of Sterol 14Î±-Demethylase (CYP51). Applied and Environmental Microbiology, 2014, 80, 6154-6166.	3.1	41
40	Plant Sterol 14Î±-Demethylase Affinity for Azole Fungicides. Biochemical and Biophysical Research Communications, 2001, 284, 845-849.	2.1	37
41	Sterol 22-desaturase, cytochrome P45061, possesses activity in xenobiotic metabolism. FEBS Letters, 1997, 412, 233-235.	2.8	36
42	Purification, Reconstitution, and Inhibition of Cytochrome P-450 Sterol Î” ²² -Desaturase from the Pathogenic Fungus <i>Candida glabrata</i>. Antimicrobial Agents and Chemotherapy, 1999, 43, 1725-1728.	3.2	35
43	Conservation and cloning of CYP51: a sterol 14Î±-demethylase from Mycobacterium smegmatis. Biochemical and Biophysical Research Communications, 2003, 301, 558-563.	2.1	33
44	Azole Antifungal Agents To Treat the Human Pathogens Acanthamoeba castellanii and Acanthamoeba polyphaga through Inhibition of Sterol 14Î±-Demethylase (CYP51). Antimicrobial Agents and Chemotherapy, 2015, 59, 4707-4713.	3.2	33
45	In VitroBiochemical Study of CYP51-Mediated Azole Resistance in Aspergillus fumigatus. Antimicrobial Agents and Chemotherapy, 2015, 59, 7771-7778.	3.2	32
46	The Evolution of Azole Resistance in <i>Candida albicans</i> Sterol 14Î±-Demethylase (CYP51) through Incremental Amino Acid Substitutions. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	32
47	Additional pathways of sterol metabolism: Evidence from analysis of Cyp27a1âˆ’/âˆ’ mouse brain and plasma. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2019, 1864, 191-211.	2.4	29
48	S279 Point Mutations in Candida albicans Sterol 14-Î± Demethylase (CYP51) Reduce <i>In Vitro</i> Inhibition by Fluconazole. Antimicrobial Agents and Chemotherapy, 2012, 56, 2099-2107.	3.2	25
49	<i>In Vitro</i> and <i>In Vivo</i> Efficacy of a Novel and Long-Acting Fungicidal Azole, PC1244, on Aspergillus fumigatus Infection. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	24
50	Widespread distribution of resistance to triazole fungicides in Brazilian populations of the wheat blast pathogen. Plant Pathology, 2021, 70, 436-448.	2.4	23
51	Mutations in Saccharomyces cerevisiae sterol C5-desaturase conferring resistance to the CYP51 inhibitor fluconazole. Biochemical and Biophysical Research Communications, 2003, 309, 999-1004.	2.1	22
52	Co-production of ethanol and squalene using a Saccharomyces cerevisiae ERG1 (squalene epoxidase) mutant and agro-industrial feedstock. Biotechnology for Biofuels, 2014, 7, 133.	6.2	21
53	The Diversity and Importance of Microbial Cytochromes P450. , 2005, , 585-617.		20
54	Identification, Characterization, and Azole-Binding Properties of Mycobacterium smegmatis CYP164A2, a Homolog of ML2088, the Sole Cytochrome P450 Gene of Mycobacterium leprae. Antimicrobial Agents and Chemotherapy, 2009, 53, 1157-1164.	3.2	20

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55	The Tetrazole VT-1161 Is a Potent Inhibitor of Trichophyton rubrum through Its Inhibition of T. rubrum CYP51. Antimicrobial Agents and Chemotherapy, 2017, 61, .	3.2	20
56	Phanerochaete chrysosporium NADPH-cytochrome P450 reductase kinetic mechanism. Biochemical and Biophysical Research Communications, 2002, 299, 189-195.	2.1	18
57	Smallâ€Molecule Inhibitors Targeting Sterol 14Î±â€Demethylase (CYP51): Synthesis, Molecular Modelling and Evaluation Against <i>Candida albicans</i>. ChemMedChem, 2020, 15, 1294-1309.	3.2	17
58	Discovery of a Novel Dual Fungal CYP51/Human 5-Lipoxygenase Inhibitor: Implications for Anti-Fungal Therapy. PLoS ONE, 2013, 8, e65928.	2.5	17
59	Azole Antifungal Sensitivity of Sterol 14Î±-Demethylase (CYP51) and CYP5218 from Malassezia globosa. Scientific Reports, 2016, 6, 27690.	3.3	14
60	Co-production of 11Î±-hydroxyprogesterone and ethanol using recombinant yeast expressing fungal steroid hydroxylases. Biotechnology for Biofuels, 2017, 10, 226.	6.2	14
61	Functional importance for developmental regulation of sterol biosynthesis in Acanthamoeba castellanii. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2018, 1863, 1164-1178.	2.4	14
62	Novel Substrate Specificity and Temperature-Sensitive Activity of Mycosphaerella graminicola CYP51 Supported by the Native NADPH Cytochrome P450 Reductase. Applied and Environmental Microbiology, 2015, 81, 3379-3386.	3.1	13
63	Expression and Characterization of CYP51, the Ancient Sterol 14-demethylase Activity for Cytochromes P450 (CYP), in the White-Rot Fungus Phanerochaete chrysosporium. Lipids, 2008, 43, 1143-1153.	1.7	12
64	Co-production of bioethanol and probiotic yeast biomass from agricultural feedstock: application of the rural biorefinery concept. AMB Express, 2014, 4, 64.	3.0	12
65	Azole sensitivity in Leptosphaeria pathogens of oilseed rape: the role of lanosterol 14Î±-demethylase. Scientific Reports, 2017, 7, 15849.	3.3	11
66	Metabolic control analysis and engineering of the yeast sterol biosynthetic pathway. Molecular Biology Reports, 2002, 29, 27-29.	2.3	10
67	Isavuconazole and voriconazole inhibition of sterol 14Î±-demethylases (CYP51) from Aspergillus fumigatus and Homo sapiens. International Journal of Antimicrobial Agents, 2019, 54, 449-455.	2.5	9
68	Abnormal Neural Responses During Reflexive Blinking in Blepharospasm: An Eventâ€Related Functional MRI Study. Movement Disorders, 2020, 35, 1173-1180.	3.9	7
69	Involvement of Human Cytochrome P450 3A4 in the metabolism of Vamidothion. Pest Management Science, 1996, 46, 287-290.	0.4	6
70	Role of Sterol Î”5(6)Desaturase in Azole Antifungal Mode of Action and Resistance. Pest Management Science, 1996, 46, 294-298.	0.4	2
71	Cytochrome P450 168A1 from Pseudomonas aeruginosa is involved in the hydroxylation of biologically relevant fatty acids. PLoS ONE, 2022, 17, e0265227.	2.5	2