May R Berenbaum

List of Publications by Year
in descending order

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94 papers	8,618 citations	66343 42 h-index	48315 88 g-index
95 all docs	95 docs citations	95 times ranked	7383 citing authors

#	Article	IF	Citations
1	Molecular Mechanisms of Metabolic Resistance to Synthetic and Natural Xenobiotics. Annual Review of Entomology, 2007, 52, 231-253.	11.8	1,617
2	Insect decline in the Anthropocene: Death by a thousand cuts. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	888
3	Functional and Evolutionary Insights from the Genomes of Three Parasitoid <i>Nasonia</i> Species. Science, 2010, 327, 343-348.	12.6	808
4	Xenobiotic detoxification pathways in honey bees. Current Opinion in Insect Science, 2015, 10, 51-58.	4.4	284
5	Structural and functional divergence of insect CYP6B proteins: From specialist to generalist cytochrome P450. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2939-2944.	7.1	262
6	Honey constituents up-regulate detoxification and immunity genes in the western honey bee <i>Apis mellifera</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8842-8846.	7.1	246
7	Jasmonate and salicylate induce expression of herbivore cytochrome P450 genes. Nature, 2002, 419, 712-715.	27.8	233
8	CYP9Q-mediated detoxification of acaricides in the honey bee (<i>Apis mellifera</i>). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12657-12662.	7.1	223
9	Anthropogenic increase in carbon dioxide compromises plant defense against invasive insects. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5129-5133.	7.1	197
10	Changes in transcript abundance relating to colony collapse disorder in honey bees (<i>Apis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 106, 14790-14795.	7.1	196
11	Synergistic Interactions Between In-Hive Miticides in <I>Apis mellifera</I>. Journal of Economic Entomology, 2009, 102, 474-479.	1.8	182
12	Postgenomic chemical ecology: from genetic code to ecological interactions. Journal of Chemical Ecology, 2002, 28, 873-896.	1.8	167
13	Diversification of furanocoumarin-metabolizing cytochrome P450 monooxygenases in two papilionids: Specificity and substrate encounter rate. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 14593-14598.	7.1	167
14	Mediation of Pyrethroid Insecticide Toxicity to Honey Bees (Hymenoptera: Apidae) by Cytochrome P450 Monooxygenases. Journal of Economic Entomology, 2006, 99, 1046-1050.	1.8	142
15	Indirect effects of insect herbivory on leaf gas exchange in soybean. Plant, Cell and Environment, 2005, 28, 402-411.	5.7	133
16	Molecular analysis of CYP321A1, a novel cytochrome P450 involved in metabolism of plant allelochemicals (furanocoumarins) and insecticides (cypermethrin) in Helicoverpa zea. Gene, 2004, 338, 163-175.	2.2	132
17	Ecologically Appropriate Xenobiotics Induce Cytochrome P450s in Apis mellifera. PLoS ONE, 2012, 7, e31051.	2.5	126
18	Quercetin-metabolizing CYP6AS enzymes of the pollinator Apis mellifera (Hymenoptera: Apidae). Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2009, 154, 427-434.	1.6	125

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19	Anthropogenic Changes in Tropospheric Composition Increase Susceptibility of Soybean to Insect Herbivory. Environmental Entomology, 2005, 34, 479-485.	1.4	115
20	Disruption of quercetin metabolism by fungicide affects energy production in honey bees (<i>Apis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 114, 2538-2543.	7.1	112
21	Plant allelochemicals differentially regulate Helicoverpa zea cytochrome P450 genes. Insect Molecular Biology, 2002, 11, 343-351.	2.0	110
22	Metabolism of linear and angular furanocoumarins by Papilio polyxenes CYP6B1 co-expressed with NADPH cytochrome P450 reductase. Insect Biochemistry and Molecular Biology, 2003, 33, 937-947.	2.7	110
23	Elevated CO2 reduces leaf damage by insect herbivores in a forest community. New Phytologist, 2005, 167, 207-218.	7.3	86
24	Structure and Function of Cytochrome P450S in Insect Adaptation to Natural and Synthetic Toxins: Insights Gained from Molecular Modeling. Journal of Chemical Ecology, 2013, 39, 1232-1245.	1.8	85
25	CYP6B1 and CYP6B3 of the Black Swallowtail (Papilio polyxenes): Adaptive Evolution through Subfunctionalization. Molecular Biology and Evolution, 2006, 23, 2434-2443.	8.9	83
26	A dietary phytochemical alters caste-associated gene expression in honey bees. Science Advances, 2015, 1, e1500795.	10.3	81
27	Mediation of Pyrethroid Insecticide Toxicity to Honey Bees (Hymenoptera: Apidae) by Cytochrome P450 Monooxygenases. Journal of Economic Entomology, 2006, 99, 1046-1050.	1.8	70
28	Regulation of an insect cytochrome P450 monooxygenase gene (CYP6B1) by aryl hydrocarbon and xanthotoxin response cascades. Gene, 2005, 358, 39-52.	2.2	69
29	Cytochrome P450 diversification and hostplant utilization patterns in specialist and generalist moths: Birth, death and adaptation. Molecular Ecology, 2017, 26, 6021-6035.	3.9	68
30	Behavioral responses of honey bees (Apis mellifera) to natural and synthetic xenobiotics in food. Scientific Reports, 2017, 7, 15924.	3.3	67
31	Toxicity of mycotoxins to honeybees and its amelioration by propolis. Apidologie, 2011, 42, 79-87.	2.0	66
32	Conserved regulatory elements in the promoters of two allelochemical-inducible cytochrome P450 genes differentially regulate transcription. Insect Biochemistry and Molecular Biology, 2004, 34, 1129-1139.	2.7	62
33	A substrate-specific cytochrome P450 monooxygenase, CYP6AB11, from the polyphagous navel orangeworm (Amyelois transitella). Insect Biochemistry and Molecular Biology, 2011, 41, 244-253.	2.7	60
34	Transcriptional regulation of thePapilio polyxenes CYP6B1gene. Nucleic Acids Research, 1994, 22, 3210-3217.	14.5	56
35	Allelochemical Induction of Cytochrome P450 Monooxygenases and Amelioration of Xenobiotic Toxicity in Helicoverpa zea. Journal of Chemical Ecology, 2007, 33, 449-461.	1.8	55
36	Effects of elevated CO2 and O3 on leaf damage and insect abundance in a soybean agroecosystem. Arthropod-Plant Interactions, 2008, 2, 125-135.	1.1	55

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37	Aflatoxin B1 detoxification by CYP321A1 in <i>Helicoverpa zea</i>. Archives of Insect Biochemistry and Physiology, 2008, 69, 32-45.	1.5	53
38	Impacts of Dietary Phytochemicals in the Presence and Absence of Pesticides on Longevity of Honey Bees (Apis mellifera). Insects, 2017, 8, 22.	2.2	53
39	Laboratory Rearing of the Parsnip Webworm, Depressaria pastinacella (Lepidoptera: Oecophoridae). Annals of the Entomological Society of America, 1988, 81, 485-487.	2.5	52
40	Insect herbivory in an intact forest understory under experimental CO 2 enrichment. Oecologia, 2004, 138, 566-573.	2.0	52
41	Ecological Significance of Induction of Broad-Substrate Cytochrome P450s by Natural and Synthetic Inducers in Helicoverpa zea. Journal of Chemical Ecology, 2009, 35, 183-189.	1.8	52
42	Transcriptional response elements in the promoter of CYP6B1, an insect P450 gene regulated by plant chemicals. Biochimica Et Biophysica Acta - General Subjects, 2003, 1619, 269-282.	2.4	46
43	Comparative Toxicity of Mycotoxins to Navel Orangeworm (Amyelois transitella) and Corn Earworm (Helicoverpa zea). Journal of Chemical Ecology, 2009, 35, 951-957.	1.8	38
44	Does the Honey Bee â€œRisk Cupâ€•Runneth Over? Estimating Aggregate Exposures for Assessing Pesticide Risks to Honey Bees in Agroecosystems. Journal of Agricultural and Food Chemistry, 2016, 64, 13-20.	5.2	37
45	Toxicity of Aflatoxin B1 to Helicoverpa zea and Bioactivation by Cytochrome P450 Monooxygenases. Journal of Chemical Ecology, 2006, 32, 1459-1471.	1.8	35
46	Metabolism of myristicin by Depressaria pastinacella CYP6AB3v2 and inhibition by its metabolite. Insect Biochemistry and Molecular Biology, 2008, 38, 645-651.	2.7	31
47	Mechanism of Resistance Acquisition and Potential Associated Fitness Costs in Amyelois transitella (Lepidoptera: Pyralidae) Exposed to Pyrethroid Insecticides. Environmental Entomology, 2015, 44, 855-863.	1.4	31
48	Honey Bees and Environmental Stress: Toxicologic Pathology of a Superorganism. Toxicologic Pathology, 2019, 47, 1076-1081.	1.8	30
49	Generalist and specialist host-parasitoid associations respond differently to wild parsnip (Pastinaca) Tj ETQq1 1 0.784314 rgBT /Overl	2.2	29
50	Genomic footprint of evolution of eusociality in bees: floral food use and CYPome â€œbloomsâ€• Insectes Sociaux, 2018, 65, 445-454.	1.2	29
51	Cytochrome P450-Mediated Metabolism of Xanthotoxin by Papilio multicaudatus. Journal of Chemical Ecology, 2006, 32, 523-536.	1.8	28
52	Biphasic concentration-dependent interaction between imidacloprid and dietary phytochemicals in honey bees (Apis mellifera). PLoS ONE, 2018, 13, e0206625.	2.5	28
53	Phenological changes in primary and secondary chemistry of reproductive parts in wild parsnip. Phytochemistry, 1997, 44, 825-831.	2.9	27
54	Honey as a Functional Food for <i>Apis mellifera</i>. Annual Review of Entomology, 2021, 66, 185-208.	11.8	27

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55	Effects of a Naturally Occurring and a Synthetic Synergist on Toxicity of Three Insecticides and a Phytochemical to Navel Orangeworm (Lepidoptera: Pyralidae). Journal of Economic Entomology, 2012, 105, 410-417.	1.8	25
56	No buzz for bees: Media coverage of pollinator decline. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	24
57	Foliage of Oaks Grown Under Elevated Co2 Reduces Performance of Antheraea polyphemus (Lepidoptera: Saturniidae). Environmental Entomology, 2007, 36, 609-617.	1.4	22
58	Foliage of Oaks Grown Under Elevated CO₂ Reduces Performance of <I>Antheraea polyphemus</I> (Lepidoptera: Saturniidae). Environmental Entomology, 2007, 36, 609-617.	1.4	22
59	Impact of Pesticide Resistance on Toxicity and Tolerance of Hostplant Phytochemicals in<i>Amyelois Transitella</i>(Lepidoptera: Pyralidae). Journal of Insect Science, 2016, 16, iew063.	1.5	22
60	Effect of Piperonyl Butoxide on the Toxicity of Four Classes of Insecticides to Navel Orangeworm (<i>Amyelois transitella</i>) (Lepidoptera: Pyralidae). Journal of Economic Entomology, 2015, 108, 2753-2760.	1.8	21
61	Aflatoxin B1: Toxicity, bioactivation and detoxification in the polyphagous caterpillar <i>Trichoplusia ni</i>. Insect Science, 2013, 20, 318-328.	3.0	19
62	Selective Sweeps in a Nutshell: The Genomic Footprint of Rapid Insecticide Resistance Evolution in the Almond Agroecosystem. Genome Biology and Evolution, 2021, 13, .	2.5	19
63	Cytochrome P450-mediated mycotoxin metabolism by plant-feeding insects. Current Opinion in Insect Science, 2021, 43, 85-91.	4.4	18
64	Elevated atmospheric CO2 alters the arthropod community in a forest understory. Acta Oecologica, 2012, 43, 80-85.	1.1	17
65	Larval Preference and Performance ofAmyelois transitella(Navel Orangeworm, Lepidoptera: Pyralidae) in Relation to the FungusAspergillus flavus. Environmental Entomology, 2016, 45, 155-162.	1.4	17
66	Behavioral responses of the parsnip webworm to host plant volatiles. Journal of Chemical Ecology, 2002, 28, 2191-2201.	1.8	14
67	Role of detoxification in<i>Varroa destructor</i>(Acari: Varroidae) tolerance of the miticide tau-fluvalinate. International Journal of Acarology, 2010, 36, 1-6.	0.7	14
68	Impact of agricultural adjuvants on the toxicity of the diamide insecticides chlorantraniliprole and flubendiamide on different life stages of the navel orangeworm (Amyelois transitella). Journal of Pest Science, 2018, 91, 1127-1136.	3.7	14
69	Orientation of Navel Orangeworm (Lepidoptera: Pyralidae) Larvae and Adults Toward Volatiles Associated With Almond Hull Split and Aspergillus flavus. Environmental Entomology, 2017, 46, 602-608.	1.4	12
70	Fungicide suppression of flight performance in the honeybee (<i>Apis mellifera</i>) and its amelioration by quercetin. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20192041.	2.6	12
71	Increase in longevity and amelioration of pesticide toxicity by natural levels of dietary phytochemicals in the honey bee, Apis mellifera. PLoS ONE, 2020, 15, e0243364.	2.5	12
72	Ameliorative Effects of Phytochemical Ingestion on Viral Infection in Honey Bees. Insects, 2020, 11, 698.	2.2	11

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73	Accelerated Development and Toxin Tolerance of the Navel Orangeworm Amyelois transitella (Lepidoptera: Pyralidae) in the Presence of Aspergillus flavus. Journal of Chemical Ecology, 2018, 44, 1170-1177.	1.8	9
74	On COVID-19, cognitive bias, and open access. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	8
75	On zombies, struldbrugs, and other horrors of the scientific literature. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	8
76	Factors Associated with Variation in Cuticular Hydrocarbon Profiles in the Navel Orangeworm, Amyelois transitella (Lepidoptera: Pyralidae). Journal of Chemical Ecology, 2020, 46, 40-47.	1.8	7
77	PNAS and prejudice. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16710-16712.	7.1	7
78	PNAS and the pandemic. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9650-9651.	7.1	7
79	Aliphatic Esters as Targets of Esterase Activity in the Parsnip Webworm (Depressaria pastinacella). Journal of Chemical Ecology, 2012, 38, 188-194.	1.8	6
80	Bees in Crisis: Colony Collapse, Honey Laundering, and Other Problems Bee-Setting American Apiculture. Proceedings of the American Philosophical Society, 2014, 158, 229-47.	0.5	6
81	Pathology in Ecological Research With Implications for One Health: Session Summary. Toxicologic Pathology, 2019, 47, 1072-1075.	1.8	5
82	On Mr. Hyslopâ€™s prediction, content archives, and preprint servers. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9131-9134.	7.1	5
83	Editorial overview: Cytochrome P450s in plantâ€“insect interactions: new insights on gut reactions. Current Opinion in Insect Science, 2021, 43, vi-ix.	4.4	4
84	Specific phytochemicals in floral nectar upâ€regulate genes involved in longevity regulation and xenobiotic metabolism, extending mosquito life span. Ecology and Evolution, 2021, 11, 8363-8380.	1.9	3
85	Thomas Eisner: Interpreter extraordinaire of nature's chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19482-19483.	7.1	2
86	Host Plant Records ofAntherina suraka(Boisduval, 1833) (Saturniidae) in Madagascar. Journal of the Lepidopterists' Society, 2014, 68, 130-140.	0.2	2
87	Meanwhile, back â€œAt the National Academiesâ€. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3343-3344.	7.1	2
88	Differential regulation of cytochrome P450 genes associated with biosynthesis and detoxification in bifenthrin-resistant populations of navel orangewom (Amyelois transitella). PLoS ONE, 2021, 16, e0245803.	2.5	2
89	A new, prairie-restricted species of Filatima Busck (Lepidoptera:) Tj ETQq1 1 0.784314 rgBT /Over	0.5	1
90	Intraspecific Variation inAntherina suraka(Lepidoptera: Saturniidae), an Endemic Resident of Endangered Forests in Madagascar. Annals of the Entomological Society of America, 2016, 109, 384-395.	2.5	1

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91	<p class="HeadingRunIn">A new, prairie-restricted species of Anacampsis Curtis (Lepidoptera: Gelechiidae) from IllinoisÂ</p>. Zootaxa, 2013, 3741, 194.	0.5	0
92	<p class="HeadingRunIn">Anacampsis rhoifructella (Clemens): clarification of its identity and larval biology, and differentiation from a similar species, Anacampsis consonella (Zeller), revised status (Lepidoptera: Gelechiidae)</p>. Zootaxa, 2014, 3794, 545.	0.5	0
93	Speaking of insectsâ€¦. Science, 2016, 353, 1343-1343.	12.6	0
94	PNAS rebrand: Improving accessibility in its many forms. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2201928119.	7.1	0