Tara D Sutherland

List of Publications by Year
in descending order

72 papers	2,865 citations	159585 30 h-index	175258 52 g-index
73 all docs	73 docs citations	73 times ranked	2657 citing authors

#	Article	IF	Citations
1	Insect Silk: One Name, Many Materials. Annual Review of Entomology, 2010, 55, 171-188.	11.8	336
2	Identification of an<i>opd</i>(Organophosphate Degradation) Gene in an<i>Agrobacterium</i>Isolate. Applied and Environmental Microbiology, 2002, 68, 3371-3376.	3.1	309
3	Enrichment of an Endosulfan-Degrading Mixed Bacterial Culture. Applied and Environmental Microbiology, 2000, 66, 2822-2828.	3.1	152
4	A Single Monooxygenase, Ese, Is Involved in the Metabolism of the Organochlorides Endosulfan and Endosulfate in an Arthrobacter sp. Applied and Environmental Microbiology, 2006, 72, 3524-3530.	3.1	113
5	Two major classes of target site insensitivity mutations confer resistance to organophosphate and carbamate insecticides. Pesticide Biochemistry and Physiology, 2004, 79, 84-93.	3.6	91
6	Conservation of Essential Design Features in Coiled Coil Silks. Molecular Biology and Evolution, 2007, 24, 2424-2432.	8.9	82
7	Comparing the organophosphorus and carbamate insecticide resistance mutations in cholin- and carboxyl-esterases. Chemico-Biological Interactions, 2005, 157-158, 269-275.	4.0	81
8	Silks produced by insect labial glands. Prion, 2008, 2, 145-153.	1.8	81
9	Honeybee silk: Recombinant protein production, assembly and fiber spinning. Biomaterials, 2010, 31, 2695-2700.	11.4	78
10	OpdA, a bacterial organophosphorus hydrolase, prevents lethality in rats after poisoning with highly toxic organophosphorus pesticides. Toxicology, 2008, 247, 88-92.	4.2	73
11	A highly divergent gene cluster in honey bees encodes a novel silk family. Genome Research, 2006, 16, 1414-1421.	5.5	70
12	The coiled coil silk of bees, ants, and hornets. Biopolymers, 2012, 97, 446-454.	2.4	63
13	Catalytic Improvement and Evolution of Atrazine Chlorohydrolase. Applied and Environmental Microbiology, 2009, 75, 2184-2191.	3.1	57
14	Target of cockroach allatostatin in the pathway of juvenile hormone biosynthesis. Molecular and Cellular Endocrinology, 1996, 120, 115-123.	3.2	53
15	Gene Cloning and Molecular Characterization of a Two-Enzyme System Catalyzing the Oxidative Detoxification of Î^{2}-Endosulfan. Applied and Environmental Microbiology, 2002, 68, 6237-6245.	3.1	53
16	Cloning and expression of the phosphotriesterase gene hocA from Pseudomonas monteilii C11 b bThe GenBank accession number for the hocA gene is AF469117.. Microbiology (United Kingdom), 2002, 148, 2687-2695.	1.8	53
17	Single Honeybee Silk Protein Mimics Properties of Multi-Protein Silk. PLoS ONE, 2011, 6, e16489.	2.5	52
18	The genomics of insecticide resistance. Genome Biology, 2003, 4, 202.	9.6	49

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19	An Unlikely Silk: The Composite Material of Green Lacewing Cocoons. Biomacromolecules, 2008, 9, 3065-3069.	5.4	48
20	Production, structure and in vitro degradation of electrospun honeybee silk nanofibers. Acta Biomaterialia, 2011, 7, 3789-3795.	8.3	46
21	Toxicity and Residues of Endosulfan Isomers. Reviews of Environmental Contamination and Toxicology, 2004, 183, 99-113.	1.3	44
22	More than one way to spin a crystallite: multiple trajectories through liquid crystallinity to solid silk. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150259.	2.6	43
23	Silk provides a new avenue for third generation biosensors: Sensitive, selective and stable electrochemical detection of nitric oxide. Biosensors and Bioelectronics, 2018, 103, 26-31.	10.1	42
24	Isolation of aPseudomonas monteillistrain with a novel phosphotriesterase. FEMS Microbiology Letters, 2002, 206, 51-55.	1.8	41
25	Fifty years later: The sequence, structure and function of lacewing cross-beta silk. Journal of Structural Biology, 2009, 168, 467-475.	2.8	40
26	Testing the evolvability of an insect carboxylesterase for the detoxification of synthetic pyrethroid insecticides. Insect Biochemistry and Molecular Biology, 2012, 42, 343-352.	2.7	39
27	Harnessing disorder: onychophorans use highly unstructured proteins, not silks, for prey capture. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 3255-3263.	2.6	38
28	Terpenoid Ï‰-hydroxylase (CYP4C7) messenger RNA levels in the corpora allata: a marker for ovarian control of juvenile hormone synthesis in Diploptera punctata. Journal of Insect Physiology, 2000, 46, 1219-1227.	2.0	37
29	Only one esterase of Drosophila melanogaster is likely to degrade juvenile hormone in vivo. Insect Biochemistry and Molecular Biology, 2007, 37, 540-549.	2.7	35
30	Structure-Based Rational Design of a Phosphotriesterase. Applied and Environmental Microbiology, 2009, 75, 5153-5156.	3.1	35
31	Cross-linking in the silks of bees, ants and hornets. Insect Biochemistry and Molecular Biology, 2014, 48, 40-50.	2.7	30
32	Micellar refolding of coiled-coil honeybee silk proteins. Journal of Materials Chemistry B, 2013, 1, 3644.	5.8	28
33	Micromolar biosensing of nitric oxide using myoglobin immobilized in a synthetic silk film. Biosensors and Bioelectronics, 2014, 62, 214-220.	10.1	27
34	Controlling the Molecular Structure and Physical Properties of Artificial Honeybee Silk by Heating or by Immersion in Solvents. PLoS ONE, 2012, 7, e52308.	2.5	27
35	A new class of animal collagen masquerading as an insect silk. Scientific Reports, 2013, 3, 2864.	3.3	25
36	Rational design of new materials using recombinant structural proteins: Current state and future challenges. Journal of Structural Biology, 2018, 201, 76-83.	2.8	24

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37	A global response to sulfur starvation inPseudomonas putidaand its relationship to the expression of low-sulfur-content proteins. FEMS Microbiology Letters, 2007, 267, 184-193.	1.8	23
38	An Australian webspinner species makes the finest known insect silk fibers. International Journal of Biological Macromolecules, 2008, 43, 271-275.	7.5	23
39	Silk from Crickets: A New Twist on Spinning. PLoS ONE, 2012, 7, e30408.	2.5	23
40	Convergently-evolved structural anomalies in the coiled coil domains of insect silk proteins. Journal of Structural Biology, 2014, 186, 402-411.	2.8	22
41	Continuous Production of Flexible Fibers from Transgenically Produced Honeybee Silk Proteins. Macromolecular Bioscience, 2013, 13, 1321-1326.	4.1	19
42	Using enzymes to clean up pesticide residues. Outlooks on Pest Management, 2002, 13, 149-151.	0.2	18
43	Dual structural color mechanisms in a scarab beetle. Journal of Morphology, 2010, 271, 1300-1305.	1.2	17
44	Natural Templates for Coiled-Coil Biomaterials from Praying Mantis Egg Cases. Biomacromolecules, 2012, 13, 4264-4272.	5.4	17
45	The other prey-capture silk: Fibres made by glow-worms (Diptera: Keroplatidae) comprise cross-Î²-sheet crystallites in an abundant amorphous fraction. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2015, 187, 78-84.	1.6	16
46	Complete Genome Sequence of a Nonculturable Methanococcus maripaludis Strain Extracted in a Metagenomic Survey of Petroleum Reservoir Fluids. Journal of Bacteriology, 2011, 193, 5595-5595.	2.2	14
47	Stabilization of Viruses by Encapsulation in Silk Proteins. ACS Applied Materials & Interfaces, 2014, 6, 18189-18196.	8.0	14
48	Recombinant production and film properties of full-length hornet silk proteins. Acta Biomaterialia, 2014, 10, 3590-3598.	8.3	14
49	De Novo Engineering of Solid-State Metalloproteins Using Recombinant Coiled-Coil Silk. ACS Biomaterials Science and Engineering, 2015, 1, 1114-1120.	5.2	14
50	Bioinspired electrocatalysts for oxygen reduction using recombinant silk films. Journal of Materials Chemistry A, 2017, 5, 10236-10243.	10.3	13
51	Phosphorescent oxygen-sensing and singlet oxygen production by a biosynthetic silk. RSC Advances, 2016, 6, 39530-39533.	3.6	12
52	An independently evolved Dipteran silk with features common to Lepidopteran silks. Insect Biochemistry and Molecular Biology, 2007, 37, 1036-1043.	2.7	11
53	Silverfish silk is formed by entanglement of randomly coiled protein chains. Insect Biochemistry and Molecular Biology, 2013, 43, 572-579.	2.7	11
54	Addressing a future pandemic: how can non-biological complex drugs prepare us for antimicrobial resistance threats?. Materials Horizons, 2022, 9, 2076-2096.	12.2	10

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55	Recombinant Structural Proteins and Their Use in Future Materials. Sub-Cellular Biochemistry, 2017, 82, 491-526.	2.4	9
56	Folding behavior of four silks of giant honey bee reflects the evolutionary conservation of aculeate silk proteins. Insect Biochemistry and Molecular Biology, 2015, 59, 72-79.	2.7	8
57	Structural Analysis of Hand Drawn Bumblebee Bombus terrestris Silk. International Journal of Molecular Sciences, 2016, 17, 1170.	4.1	6
58	Modification of Honeybee Silk by the Addition of Antimicrobial Agents. ACS Omega, 2017, 2, 4456-4463.	3.5	6
59	Design of silk proteins with increased heme binding capacity and fabrication of silk-heme materials. Journal of Inorganic Biochemistry, 2017, 177, 219-227.	3.5	5
60	Isolation of a Pseudomonas monteilli strain with a novel phosphotriesterase. FEMS Microbiology Letters, 2002, 206, 51-55.	1.8	5
61	Progressing Antimicrobial Resistance Sensing Technologies across Human, Animal, and Environmental Health Domains. ACS Sensors, 2021, 6, 4283-4296.	7.8	5
62	A <i>Brevibacillus choshinensis</i> System That Secretes Cytoplasmic Proteins. Journal of Molecular Microbiology and Biotechnology, 2004, 8, 81-90.	1.0	4
63	A comparison of convergently evolved insect silks that share Î²â€sheet molecular structure. Biopolymers, 2014, 101, 630-639.	2.4	4
64	Confirmation of Bioinformatics Predictions of the Structural Domains in Honeybee Silk. Polymers, 2018, 10, 776.	4.5	4
65	Biocompatibility and immunogenic response to recombinant honeybee silk material. Journal of Biomedical Materials Research - Part A, 2019, 107, 1763-1770.	4.0	4
66	Engineering a solid-state metalloprotein hydrogen evolution catalyst. Scientific Reports, 2020, 10, 3774.	3.3	4
67	Evolution and Application of Coiled Coil Silks from Insects. Biologically-inspired Systems, 2014, , 87-106.	0.2	3
68	Did aculeate silk evolve as an antifouling material?. PLoS ONE, 2018, 13, e0203948.	2.5	3
69	Enhancement of metallomacrocycle-based oxygen reduction catalysis through immobilization in a tunable silk-protein scaffold. Journal of Inorganic Biochemistry, 2020, 204, 110960.	3.5	3
70	Regulation of Juvenile Hormone synthesis in the blowfly Lucilla cuprina. Physiological Entomology, 1997, 22, 183-190.	1.5	2
71	Could home-based FeNO measurements breathe new life into asthma management?. Journal of Asthma, 2019, 56, 910-913.	1.7	2
72	The Requirement of Genetic Diagnostic Technologies for Environmental Surveillance of Antimicrobial Resistance. Sensors, 2021, 21, 6625.	3.8	2