Tara D Sutherland

List of Publications by Year
in descending order

72 papers	2,865 citations	159525 30 h-index	175177 52 g-index
73 all docs	73 docs citations	73 times ranked	2657 citing authors

#	Article	IF	Citations
1	Addressing a future pandemic: how can non-biological complex drugs prepare us for antimicrobial resistance threats?. Materials Horizons, 2022, 9, 2076-2096.	6.4	10
2	The Requirement of Genetic Diagnostic Technologies for Environmental Surveillance of Antimicrobial Resistance. Sensors, 2021, 21, 6625.	2.1	2
3	Progressing Antimicrobial Resistance Sensing Technologies across Human, Animal, and Environmental Health Domains. ACS Sensors, 2021, 6, 4283-4296.	4.0	5
4	Enhancement of metallomacrocycle-based oxygen reduction catalysis through immobilization in a tunable silk-protein scaffold. Journal of Inorganic Biochemistry, 2020, 204, 110960.	1.5	3
5	Engineering a solid-state metalloprotein hydrogen evolution catalyst. Scientific Reports, 2020, 10, 3774.	1.6	4
6	Could home-based FeNO measurements breathe new life into asthma management?. Journal of Asthma, 2019, 56, 910-913.	0.9	2
7	Biocompatibility and immunogenic response to recombinant honeybee silk material. Journal of Biomedical Materials Research - Part A, 2019, 107, 1763-1770.	2.1	4
8	Rational design of new materials using recombinant structural proteins: Current state and future challenges. Journal of Structural Biology, 2018, 201, 76-83.	1.3	24
9	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.	5.3	42
10	Did aculeate silk evolve as an antifouling material?. PLoS ONE, 2018, 13, e0203948.	1.1	3
11	Confirmation of Bioinformatics Predictions of the Structural Domains in Honeybee Silk. Polymers, 2018, 10, 776.	2.0	4
12	Recombinant Structural Proteins and Their Use in Future Materials. Sub-Cellular Biochemistry, 2017, 82, 491-526.	1.0	9
13	Bioinspired electrocatalysts for oxygen reduction using recombinant silk films. Journal of Materials Chemistry A, 2017, 5, 10236-10243.	5.2	13
14	Modification of Honeybee Silk by the Addition of Antimicrobial Agents. ACS Omega, 2017, 2, 4456-4463.	1.6	6
15	Design of silk proteins with increased heme binding capacity and fabrication of silk-heme materials. Journal of Inorganic Biochemistry, 2017, 177, 219-227.	1.5	5
16	Structural Analysis of Hand Drawn Bumblebee Bombus terrestris Silk. International Journal of Molecular Sciences, 2016, 17, 1170.	1.8	6
17	Phosphorescent oxygen-sensing and singlet oxygen production by a biosynthetic silk. RSC Advances, 2016, 6, 39530-39533.	1.7	12
18	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.	0.7	16

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19	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.	1.2	43
20	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.	1.2	8
21	De Novo Engineering of Solid-State Metalloproteins Using Recombinant Coiled-Coil Silk. ACS Biomaterials Science and Engineering, 2015, 1, 1114-1120.	2.6	14
22	Evolution and Application of Coiled Coil Silks from Insects. Biologically-inspired Systems, 2014, , 87-106.	0.4	3
23	Convergently-evolved structural anomalies in the coiled coil domains of insect silk proteins. Journal of Structural Biology, 2014, 186, 402-411.	1.3	22
24	A comparison of convergently evolved insect silks that share Î²â€sheet molecular structure. Biopolymers, 2014, 101, 630-639.	1.2	4
25	Stabilization of Viruses by Encapsulation in Silk Proteins. ACS Applied Materials & Interfaces, 2014, 6, 18189-18196.	4.0	14
26	Micromolar biosensing of nitric oxide using myoglobin immobilized in a synthetic silk film. Biosensors and Bioelectronics, 2014, 62, 214-220.	5.3	27
27	Cross-linking in the silks of bees, ants and hornets. Insect Biochemistry and Molecular Biology, 2014, 48, 40-50.	1.2	30
28	Recombinant production and film properties of full-length hornet silk proteins. Acta Biomaterialia, 2014, 10, 3590-3598.	4.1	14
29	Silverfish silk is formed by entanglement of randomly coiled protein chains. Insect Biochemistry and Molecular Biology, 2013, 43, 572-579.	1.2	11
30	Micellar refolding of coiled-coil honeybee silk proteins. Journal of Materials Chemistry B, 2013, 1, 3644.	2.9	28
31	A new class of animal collagen masquerading as an insect silk. Scientific Reports, 2013, 3, 2864.	1.6	25
32	Continuous Production of Flexible Fibers from Transgenically Produced Honeybee Silk Proteins. Macromolecular Bioscience, 2013, 13, 1321-1326.	2.1	19
33	Natural Templates for Coiled-Coil Biomaterials from Praying Mantis Egg Cases. Biomacromolecules, 2012, 13, 4264-4272.	2.6	17
34	Testing the evolvability of an insect carboxylesterase for the detoxification of synthetic pyrethroid insecticides. Insect Biochemistry and Molecular Biology, 2012, 42, 343-352.	1.2	39
35	Silk from Crickets: A New Twist on Spinning. PLoS ONE, 2012, 7, e30408.	1.1	23
36	The coiled coil silk of bees, ants, and hornets. Biopolymers, 2012, 97, 446-454.	1.2	63

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37	Controlling the Molecular Structure and Physical Properties of Artificial Honeybee Silk by Heating or by Immersion in Solvents. PLoS ONE, 2012, 7, e52308.	1.1	27
38	Production, structure and in vitro degradation of electrospun honeybee silk nanofibers. Acta Biomaterialia, 2011, 7, 3789-3795.	4.1	46
39	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.	1.0	14
40	Single Honeybee Silk Protein Mimics Properties of Multi-Protein Silk. PLoS ONE, 2011, 6, e16489.	1.1	52
41	Honeybee silk: Recombinant protein production, assembly and fiber spinning. Biomaterials, 2010, 31, 2695-2700.	5.7	78
42	Dual structural color mechanisms in a scarab beetle. Journal of Morphology, 2010, 271, 1300-1305.	0.6	17
43	Insect Silk: One Name, Many Materials. Annual Review of Entomology, 2010, 55, 171-188.	5.7	336
44	Harnessing disorder: onychophorans use highly unstructured proteins, not silks, for prey capture. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 3255-3263.	1.2	38
45	Catalytic Improvement and Evolution of Atrazine Chlorohydrolase. Applied and Environmental Microbiology, 2009, 75, 2184-2191.	1.4	57
46	Structure-Based Rational Design of a Phosphotriesterase. Applied and Environmental Microbiology, 2009, 75, 5153-5156.	1.4	35
47	Fifty years later: The sequence, structure and function of lacewing cross-beta silk. Journal of Structural Biology, 2009, 168, 467-475.	1.3	40
48	OpdA, a bacterial organophosphorus hydrolase, prevents lethality in rats after poisoning with highly toxic organophosphorus pesticides. Toxicology, 2008, 247, 88-92.	2.0	73
49	An Unlikely Silk: The Composite Material of Green Lacewing Cocoons. Biomacromolecules, 2008, 9, 3065-3069.	2.6	48
50	An Australian webspinner species makes the finest known insect silk fibers. International Journal of Biological Macromolecules, 2008, 43, 271-275.	3.6	23
51	Silks produced by insect labial glands. Prion, 2008, 2, 145-153.	0.9	81
52	Conservation of Essential Design Features in Coiled Coil Silks. Molecular Biology and Evolution, 2007, 24, 2424-2432.	3.5	82
53	Only one esterase of Drosophila melanogaster is likely to degrade juvenile hormone in vivo. Insect Biochemistry and Molecular Biology, 2007, 37, 540-549.	1.2	35
54	An independently evolved Dipteran silk with features common to Lepidopteran silks. Insect Biochemistry and Molecular Biology, 2007, 37, 1036-1043.	1.2	11

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55	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.	0.7	23
56	A highly divergent gene cluster in honey bees encodes a novel silk family. Genome Research, 2006, 16, 1414-1421.	2.4	70
57	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.	1.4	113
58	Comparing the organophosphorus and carbamate insecticide resistance mutations in cholin- and carboxyl-esterases. Chemico-Biological Interactions, 2005, 157-158, 269-275.	1.7	81
59	A <i>Brevibacillus choshinensis</i> System That Secretes Cytoplasmic Proteins. Journal of Molecular Microbiology and Biotechnology, 2004, 8, 81-90.	1.0	4
60	Two major classes of target site insensitivity mutations confer resistance to organophosphate and carbamate insecticides. Pesticide Biochemistry and Physiology, 2004, 79, 84-93.	1.6	91
61	Toxicity and Residues of Endosulfan Isomers. Reviews of Environmental Contamination and Toxicology, 2004, 183, 99-113.	0.7	44
62	The genomics of insecticide resistance. Genome Biology, 2003, 4, 202.	13.9	49
63	Gene Cloning and Molecular Characterization of a Two-Enzyme System Catalyzing the Oxidative Detoxification of Î²-Endosulfan. Applied and Environmental Microbiology, 2002, 68, 6237-6245.	1.4	53
64	Identification of an opd (Organophosphate Degradation) Gene in an Agrobacterium Isolate. Applied and Environmental Microbiology, 2002, 68, 3371-3376.	1.4	309
65	Using enzymes to clean up pesticide residues. Outlooks on Pest Management, 2002, 13, 149-151.	0.2	18
66	Isolation of aPseudomonas monteillistrain with a novel phosphotriesterase. FEMS Microbiology Letters, 2002, 206, 51-55.	0.7	41
67	Isolation of a Pseudomonas monteilli strain with a novel phosphotriesterase. FEMS Microbiology Letters, 2002, 206, 51-55.	0.7	5
68	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.	0.7	53
69	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.	0.9	37
70	Enrichment of an Endosulfan-Degrading Mixed Bacterial Culture. Applied and Environmental Microbiology, 2000, 66, 2822-2828.	1.4	152
71	Regulation of Juvenile Hormone synthesis in the blowfly Lucilla cuprina. Physiological Entomology, 1997, 22, 183-190.	0.6	2
72	Target of cockroach allatostatin in the pathway of juvenile hormone biosynthesis. Molecular and Cellular Endocrinology, 1996, 120, 115-123.	1.6	53