Mary Higby Schweitzer

List of Publications by Year
in descending order

74 papers	3,462 citations	109311 35 h-index	149686 56 g-index
77 all docs	77 docs citations	77 times ranked	2205 citing authors

#	Article	IF	Citations
1	Deep Time Paleoproteomics: Looking Forward. Journal of Proteome Research, 2022, 21, 9-19.	3.7	12
2	Environmental Factors Affecting Feather Taphonomy. Biology, 2022, 11, 703.	2.8	2
3	Keratan sulfate as a marker for medullary bone in fossil vertebrates. Journal of Anatomy, 2021, 238, 1296-1311.	1.5	2
4	Molecular tests support the viability of rare earth elements as proxies for fossil biomolecule preservation. Scientific Reports, 2020, 10, 15566.	3.3	13
5	Evidence of proteins, chromosomes and chemical markers of DNA in exceptionally preserved dinosaur cartilage. National Science Review, 2020, 7, 815-822.	9.5	27
6	Identifying medullary bone in extinct avemetatarsalians: challenges, implications and perspectives. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190133.	4.0	14
7	Proteomic method to extract, concentrate, digest and enrich peptides from fossils with coloured (humic) substances for mass spectrometry analyses. Royal Society Open Science, 2019, 6, 181433.	2.4	15
8	Mechanisms of soft tissue and protein preservation in Tyrannosaurus rex. Scientific Reports, 2019, 9, 15678.	3.3	27
9	The molecular evolution of feathers with direct evidence from fossils. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3018-3023.	7.1	45
10	Paleoproteomics of Mesozoic Dinosaurs and Other Mesozoic Fossils. Proteomics, 2019, 19, e1800251.	2.2	28
11	Systemic distribution of medullary bone in the avian skeleton: ground truthing criteria for the identification of reproductive tissues in extinct Avemetatarsalia. BMC Evolutionary Biology, 2019, 19, 71.	3.2	33
12	Dinosaur paleohistology: review, trends and new avenues of investigation. PeerJ, 2019, 7, e7764.	2.0	22
13	Preservation potential of keratin in deep time. PLoS ONE, 2018, 13, e0206569.	2.5	16
14	Soft-tissue evidence for homeothermy and crypsis in a Jurassic ichthyosaur. Nature, 2018, 564, 359-365.	27.8	81
15	Resonance Raman imagery of semi-fossilized soft tissues. , 2018, , .		1
16	Expansion for theBrachylophosaurus canadensisCollagen I Sequence and Additional Evidence of the Preservation of Cretaceous Protein. Journal of Proteome Research, 2017, 16, 920-932.	3.7	80
17	Biochemistry and adaptive colouration of an exceptionally preserved juvenile fossil sea turtle. Scientific Reports, 2017, 7, 13324.	3.3	36
18	Molecular evidence of keratin and melanosomes in feathers of the Early Cretaceous bird Eoconfuciusornis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7900-E7907.	7.1	56

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19	Chemistry supports the identification of gender-specific reproductive tissue in Tyrannosaurus rex. Scientific Reports, 2016, 6, 23099.	3.3	38
20	Microscopic and immunohistochemical analyses of the claw of the nesting dinosaur, Citipati osmolskae. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20161997.	2.6	19
21	Testing the Hypothesis of Biofilm as a Source for Soft Tissue and Cell-Like Structures Preserved in Dinosaur Bone. PLoS ONE, 2016, 11, e0150238.	2.5	23
22	Keratin Durability Has Implications for the Fossil Record: Results from a 10 Year Feather Degradation Experiment. PLoS ONE, 2016, 11, e0157699.	2.5	32
23	Bone protein â€œextractomicsâ€: comparing the efficiency of bone protein extractions ofGallus gallusin tandem mass spectrometry, with an eye towards paleoproteomics. PeerJ, 2016, 4, e2603.	2.0	38
24	Alligator osteoderms as a source of labile calcium for eggshell formation. Journal of Zoology, 2015, 297, 255-264.	1.7	34
25	Melanosomes and ancient coloration reâ€examined: A response to Vinther 2015 (DOI) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	2.5	22
26	Biologically and diagenetically derived peptide modifications in moa collagens. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150015.	2.6	67
27	Interpreting melanin-based coloration through deep time: a critical review. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150614.	2.6	60
28	Mass Spectrometry and Antibody-Based Characterization of Blood Vessels from Brachylophosaurus canadensis. Journal of Proteome Research, 2015, 14, 5252-5262.	3.7	59
29	A Pelomedusoid Turtle from the Paleoceneâ€“Eocene of Colombia Exhibiting Preservation of Blood Vessels and Osteocytes. Journal of Herpetology, 2014, 48, 461-465.	0.5	15
30	Blood from Stone. Scientific American Reports, 2014, 23, 104-111.	0.0	0
31	Protein Molecular Data from Ancient (>1 million years old) Fossil Material: Pitfalls, Possibilities and Grand Challenges. Analytical Chemistry, 2014, 86, 6731-6740.	6.5	22
32	A role for iron and oxygen chemistry in preserving soft tissues, cells and molecules from deep time. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132741.	2.6	77
33	Dinosaurs Are Important. Scientific American, 2014, 310, 12-12.	1.0	0
34	Synchrotron Chemical and Structural Analysis of Tyrannosaurus rex Blood Vessels: The Contribution of Collagen Hypercrosslinking to Tissue Longevity. Microscopy and Microanalysis, 2014, 20, 1430-1431.	0.4	2
35	Melanosomes or Microbes: Testing an Alternative Hypothesis for the Origin of Microbodies in Fossil Feathers. Scientific Reports, 2014, 4, 4233.	3.3	58
36	Molecular analyses of dinosaur osteocytes support the presence of endogenous molecules. Bone, 2013, 52, 414-423.	2.9	80

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37	Chemical Analyses of Fossil Bone. Methods in Molecular Biology, 2012, 915, 153-172.	0.9	4
38	Variation in osteocytes morphology vs bone type in turtle shell and their exceptional preservation from the Jurassic to the present. Bone, 2012, 51, 614-620.	2.9	29
39	Empirical Evaluation of Bone Extraction Protocols. PLoS ONE, 2012, 7, e31443.	2.5	52
40	Soft Tissue Preservation in Terrestrial Mesozoic Vertebrates. Annual Review of Earth and Planetary Sciences, 2011, 39, 187-216.	11.0	111
41	Histological, chemical, and morphological reexamination of the â€œheartâ€•of a small Late Cretaceous Thescelosaurus. Die Naturwissenschaften, 2011, 98, 203-211.	1.6	15
42	Dinosaur Peptides Suggest Mechanisms of Protein Survival. PLoS ONE, 2011, 6, e20381.	2.5	39
43	Limb bone histology and growth in Placerias hesternus (Therapsida: Anomodontia) from the Upper Triassic of North America. Palaeontology, 2010, 53, 347-364.	2.2	16
44	Blood from Stone. Scientific American, 2010, 303, 62-69.	1.0	11
45	Biomolecular Characterization and Protein Sequences of the Campanian Hadrosaur B. canadensis. Science, 2009, 324, 626-631.	12.6	212
46	Molecular Phylogenetics of Mastodon and Tyrannosaurus rex. Science, 2008, 320, 499-499.	12.6	53
47	Microscopic, chemical and molecular methods for examining fossil preservation. Comptes Rendus - Palevol, 2008, 7, 159-184.	0.2	58
48	Interpreting Sequences from Mastodon and T. rex. Science, 2007, 317, 1324-1325.	12.6	45
49	Soft tissue and cellular preservation in vertebrate skeletal elements from the Cretaceous to the present. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 183-197.	2.6	100
50	Protein Sequences from Mastodon and Tyrannosaurus Rex Revealed by Mass Spectrometry. Science, 2007, 316, 280-285.	12.6	273
51	Porphyrin as an Ideal Biomarker in the Search for Extraterrestrial Life. Astrobiology, 2007, 7, 605-615.	3.0	45
52	Do egg-laying crocodilian (Alligator mississippiensis) archosaurs form medullary bone?. Bone, 2007, 40, 1152-1158.	2.9	51
53	Will current technologies enable dinosaur proteomics?. Expert Review of Proteomics, 2007, 4, 695-699.	3.0	4
54	Analyses of Soft Tissue from Tyrannosaurus rex Suggest the Presence of Protein. Science, 2007, 316, 277-280.	12.6	187

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55	The Sauropods: Evolution and Paleobiology Kristina A. Curry Rogers, Jeffrey A. Wilson . 2005. The University of California Press. Berkeley, California. ISBN: 978-0-520-24623-2 (hard cover). 358 $65.00 (hard cover).. Copeia, 2007, 2007, 234-237.	1.3	0
56	Soft-Tissue Vessels and Cellular Preservation in Tyrannosaurus rex. Science, 2005, 307, 1952-1955.	12.6	143
57	Gender-Specific Reproductive Tissue in Ratites and Tyrannosaurus rex. Science, 2005, 308, 1456-1460.	12.6	133
58	A silicified bird from Quaternary hot spring deposits. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 905-911.	2.6	15
59	Molecular preservation in Late Cretaceous sauropod dinosaur eggshells. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 775-784.	2.6	32
60	Experimental Support for an Immunological Approach to the Search for Life on Other Planets. Astrobiology, 2005, 5, 30-47.	3.0	27
61	Preservation of Bone Collagen from the Late Cretaceous Period Studied by Immunological Techniques and Atomic Force Microscopy. Langmuir, 2005, 21, 3584-3590.	3.5	26
62	Molecular paleontology: some current advances and problems. Annales De Paleontologie, 2004, 90, 81-102.	0.5	21
63	Comparison of Antibodyâ^'Antigen Interactions on Collagen Measured by Conventional Immunological Techniques and Atomic Force Microscopy. Langmuir, 2004, 20, 11053-11063.	3.5	33
64	Remarkable Preservation of Undigested Muscle Tissue Within a Late Cretaceous Tyrannosaurid Coprolite from Alberta, Canada. Palaios, 2003, 18, 286-294.	1.3	101
65	Late Cretaceous avian eggs with embryos from Argentina. Journal of Vertebrate Paleontology, 2002, 22, 191-195.	1.0	67
66	Identification of Immunoreactive Material in Mammoth Fossils. Journal of Molecular Evolution, 2002, 55, 696-705.	1.8	49
67	Dinosaur eggshell study using scanning electron microscopy. Scanning, 2002, 24, 217-223.	1.5	11
68	A molecular model for the evolution of endothermy in the theropod-bird lineage. The Journal of Experimental Zoology, 2001, 291, 317-338.	1.4	40
69	Intravascular microstructures in trabecular bone tissues of Tyrannosaurus rex. Annales De Paleontologie, 1999, 85, 179-192.	0.5	27
70	Keratin immunoreactivity in the Late Cretaceous birdRahonavis ostromi. Journal of Vertebrate Paleontology, 1999, 19, 712-722.	1.0	45
71	Preservation of biomolecules in cancellous bone ofTyrannosaurus rex. Journal of Vertebrate Paleontology, 1997, 17, 349-359.	1.0	49
72	Heme compounds in dinosaur trabecular bone. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 6291-6296.	7.1	73

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73	Detecting dinosaur DNA. Science, 1995, 268, 1191-1192.	12.6	80
74	Will the Dinosaurs Rise Again?. The Paleontological Society Special Publications, 1994, 7, 309-326.	0.0	1