

Wen Yang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3265746/publications.pdf>

Version: 2024-02-01

42
papers

3,671
citations

172457

29
h-index

289244

40
g-index

43
all docs

43
docs citations

43
times ranked

3598
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Design Variations in Beetle Elytra. <i>Advanced Functional Materials</i> , 2021, 31, 2106468.	14.9	12
2	Structural Design Variations in Beetle Elytra (<i>Adv. Funct. Mater.</i> 50/2021). <i>Advanced Functional Materials</i> , 2021, 31, .	14.9	0
3	On the Strength of Hair across Species. <i>Matter</i> , 2020, 2, 136-149.	10.0	18
4	On the gular sac tissue of the brown pelican: Structural characterization and mechanical properties. <i>Acta Biomaterialia</i> , 2020, 118, 161-181.	8.3	3
5	Structure and Mechanical Adaptability of a Modern Elasmoid Fish Scale from the Common Carp. <i>Matter</i> , 2020, 3, 842-863.	10.0	47
6	Active defense mechanisms of thorny catfish. <i>Materials Today</i> , 2020, 38, 35-48.	14.2	8
7	The toughness of porcine skin: Quantitative measurements and microstructural characterization. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 109, 103848.	3.1	14
8	Hyperelastic phase-field fracture mechanics modeling of the toughening induced by Bouligand structures in natural materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 131, 204-220.	4.8	50
9	Arapaima Fish Scale: One of the Toughest Flexible Biological Materials. <i>Matter</i> , 2019, 1, 1557-1566.	10.0	40
10	Tensile behavior and structural characterization of pig dermis. <i>Acta Biomaterialia</i> , 2019, 86, 77-95.	8.3	64
11	How Water Can Affect Keratin: Hydration-Driven Recovery of Bighorn Sheep (<i>Ovis Canadensis</i>) Horns. <i>Advanced Functional Materials</i> , 2019, 29, 1901077.	14.9	29
12	A natural energy absorbent polymer composite: The equine hoof wall. <i>Acta Biomaterialia</i> , 2019, 90, 267-277.	8.3	47
13	Structural architectures with toughening mechanisms in Nature: A review of the materials science of Type-I collagenous materials. <i>Progress in Materials Science</i> , 2019, 103, 425-483.	32.8	78
14	Novel Defense Mechanisms in the Armor of the Scales of the "Living Fossil" Coelacanth Fish. <i>Advanced Functional Materials</i> , 2018, 28, 1804237.	14.9	61
15	Structural characterization and viscoelastic constitutive modeling of skin. <i>Acta Biomaterialia</i> , 2017, 53, 460-469.	8.3	44
16	Structure and mechanical behavior of human hair. <i>Materials Science and Engineering C</i> , 2017, 73, 152-163.	7.3	112
17	Viscoelastic properties of α -keratin fibers in hair. <i>Acta Biomaterialia</i> , 2017, 64, 15-28.	8.3	28
18	A comparative study of piscine defense: The scales of <i>Arapaima gigas</i> , <i>Latimeria chalumnae</i> and <i>Atractosteus spatula</i> . <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 73, 1-16.	3.1	52

#	ARTICLE	IF	CITATIONS
19	Pangolin armor: Overlapping, structure, and mechanical properties of the keratinous scales. <i>Acta Biomaterialia</i> , 2016, 41, 60-74.	8.3	109
20	Keratin: Structure, mechanical properties, occurrence in biological organisms, and efforts at bioinspiration. <i>Progress in Materials Science</i> , 2016, 76, 229-318.	32.8	571
21	A Sustainable Substitute for Ivory: the Jarina Seed from the Amazon. <i>Scientific Reports</i> , 2015, 5, 14387.	3.3	12
22	The materials science of collagen. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015, 52, 22-50.	3.1	227
23	The armored carapace of the boxfish. <i>Acta Biomaterialia</i> , 2015, 23, 1-10.	8.3	63
24	On the tear resistance of skin. <i>Nature Communications</i> , 2015, 6, 6649.	12.8	297
25	Leatherback sea turtle shell: A tough and flexible biological design. <i>Acta Biomaterialia</i> , 2015, 28, 2-12.	8.3	84
26	Biological Self-Organization of Fiber Like Aragonite and Its Effect on Mechanical Behavior of Veined Rapa Whelk Shell. <i>Journal of the American Ceramic Society</i> , 2015, 98, 3319-3325.	3.8	23
27	Alligator osteoderms: Mechanical behavior and hierarchical structure. <i>Materials Science and Engineering C</i> , 2014, 35, 441-448.	7.3	39
28	Protective role of <i>Arapaima gigas</i> fish scales: Structure and mechanical behavior. <i>Acta Biomaterialia</i> , 2014, 10, 3599-3614.	8.3	161
29	Structure and fracture resistance of alligator gar (<i>Atractosteus spatula</i>) armored fish scales. <i>Acta Biomaterialia</i> , 2013, 9, 5876-5889.	8.3	116
30	Mechanical adaptability of the Bouligand-type structure in natural dermal armour. <i>Nature Communications</i> , 2013, 4, 2634.	12.8	277
31	Axial compression of a hollow cylinder filled with foam: A study of porcupine quills. <i>Acta Biomaterialia</i> , 2013, 9, 5297-5304.	8.3	46
32	Separating the influence of the cortex and foam on the mechanical properties of porcupine quills. <i>Acta Biomaterialia</i> , 2013, 9, 9065-9074.	8.3	48
33	Natural Flexible Dermal Armor. <i>Advanced Materials</i> , 2013, 25, 31-48.	21.0	327
34	Comparisons of Microstructures and Hardness Distribution between <i>Clinocardium Californiense</i> and Veined Rapa Whelk Shells. <i>Key Engineering Materials</i> , 2013, 544, 295-298.	0.4	3
35	Predation versus protection: Fish teeth and scales evaluated by nanoindentation. <i>Journal of Materials Research</i> , 2012, 27, 100-112.	2.6	83
36	The Structure, Functions, and Mechanical Properties of Keratin. <i>Jom</i> , 2012, 64, 449-468.	1.9	266

