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List of Publications by Year in Descending Order

494 papers	15,811 citations	63 h-index	108 g-index
548 ext. papers	18,569 ext. citations	4.1 avg, IF	7.21 L-index

#	Paper	IF	Citations
494	Gecko adhesion: a molecular-simulation perspective on the effect of humidity.. *Soft Matter*, **2022**,	3.6	4
493	Cerotegument microstructure of whip spiders (Amblypygi: Euamblypygi Weygoldt, 1996) reveals characters for systematics from family to species level.. *Journal of Morphology*, **2022**,	1.6	1
492	Tissue Engineered Transcatheter Pulmonary Valved Stent Implantation: Current State and Future Prospect.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	1
491	Effects of a FCBP gene polymorphism, location, and sex on Young's modulus of the tenth primary feather in racing pigeons.. *Scientific Reports*, **2022**, 12, 1785	4.9	
490	Bio-inspired adhesion control with liquids.. *IScience*, **2022**, 25, 103864	6.1	1
489	Fin Ray Crossbeam Angles for Efficient Foot Design for Energy-Efficient Robot Locomotion. *Advanced Intelligent Systems*, **2022**, 4, 2100133	6	
488	Multi-modal locomotor costs favor smaller males in a sexually dimorphic leaf-mimicking insect.. *Bmc Ecology and Evolution*, **2022**, 22, 39	21	2
487	Structure of Keratins in Adhesive Gecko Setae Determined by Near-Edge X-ray Absorption Fine Structure Spectromicroscopy.. *Journal of Physical Chemistry Letters*, **2022**, 2193-2196	6.4	2
486	Anti-icing strategies of plant surfaces: the ice formation on leaves visualized by Cryo-SEM experiments.. *Die Naturwissenschaften*, **2022**, 109, 24	2	0
485	Distal leg structures of Zoraptera - did the loss of adhesive devices curb the chance of diversification?. *Arthropod Structure and Development*, **2022**, 68, 101164	1.8	1
484	Spreading of Red Caviar Cells: The Knife-Cell and the Cell-Cell Adhesive Interactions. *Biologically-inspired Systems*, **2022**, 117-137	0.7	
483	Effect of sample treatment on the elastic modulus of locust cuticle obtained by nanoindentation.. *Beilstein Journal of Nanotechnology*, **2022**, 13, 404-410	3	
482	Elemental analyses reveal distinct mineralization patterns in radular teeth of various molluscan taxa.. *Scientific Reports*, **2022**, 12, 7499	4.9	1
481	Finite element analysis relating shape, material properties, and dimensions of taenioglossan radular teeth with trophic specialisations in Paludomidae (Gastropoda). *Scientific Reports*, **2021**, 11, 22775	4.9	1
480	Granular Media Friction Pad for Robot Shoes: Hexagon Patterning Enhances Friction on Wet Surfaces. *Applied Sciences (Switzerland)*, **2021**, 11, 11287	2.6	2
479	The damping properties of the foam-filled shaft of primary feathers of the pigeon Columba livia. *Die Naturwissenschaften*, **2021**, 109, 1	2	1
478	Hydrophilic and opened canals in honey bee tongue rods endow elastic structures with multiple functions. *Acta Biomaterialia*, **2021**, 137, 162-162	10.8	1

477	Influence of water content on mechanical behaviour of gastropod taenioglossan radulae. *Proceedings of the Royal Society B: Biological Sciences*, **2021**, 288, 20203173	4.4	10
476	Heat-distribution in the body and wings of the morpho dragonfly Zenithoptera lanei (Anisoptera: Libellulidae) and a possible mechanism of thermoregulation. *Biological Journal of the Linnean Society*, **2021**, 133, 179-186	1.9	3
475	Trophic specialisation reflected by radular tooth material properties in an "ancient" Lake Tanganyikan gastropod species flock. *Bmc Ecology and Evolution*, **2021**, 21, 35	21	5
474	Triple Stiffness: A Bioinspired Strategy to Combine Load-Bearing, Durability, and Impact-Resistance. *Advanced Science*, **2021**, 8, e2004338	13.6	1
473	Evidence for intermolecular forces involved in ladybird beetle tarsal setae adhesion. *Scientific Reports*, **2021**, 11, 7729	4.9	4
472	Excavation mechanics of the elongated female rostrum of the acorn weevil Curculio glandium (Coleoptera; Curculionidae). *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	1
471	Radula packing and storage facilitated by tooth morphology in selected taenioglossan Gastropoda. *Journal of Molluscan Studies*, **2021**, 87,	1.1	2
470	Functional morphology of the raptorial forelegs in Mantispa styriaca (Insecta: Neuroptera). *Zoomorphology*, **2021**, 140, 231-241	1	1
469	Gecko Feet-Inspired Self-Peeling Switchable Dry/Wet Adhesive. *Chemistry of Materials*, **2021**, 33, 2785-2795	9.9	18
468	Getting grip in changing environments: the effect of friction anisotropy inversion on robot locomotion. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	1
467	Penetration mechanics of elongated female and male genitalia of earwigs. *Scientific Reports*, **2021**, 11, 7920	4.9	1
466	Body-catapult mechanism of the sandhopper jump and its biomimetic implications. *Acta Biomaterialia*, **2021**, 124, 282-290	10.8	1
465	Surface chemistry of the ladybird beetle adhesive foot fluid across various substrates. *Biointerphases*, **2021**, 16, 031004	1.8	2
464	Radular force performance of stylommatophoran gastropods (Mollusca) with distinct body masses. *Scientific Reports*, **2021**, 11, 10560	4.9	3
463	Feeding experiments on Vittina turrita (Mollusca, Gastropoda, Neritidae) reveal tooth contact areas and bent radular shape during foraging. *Scientific Reports*, **2021**, 11, 9556	4.9	8
462	Multi-Technique Investigation of a Biomimetic Insect Tarsal Adhesive Fluid. *Frontiers in Mechanical Engineering*, **2021**, 7,	2.6	2
461	Wing coupling mechanism in the butterfly Pieris rapae (Lepidoptera, Pieridae) and its role in taking off. *Journal of Insect Physiology*, **2021**, 131, 104212	2.4	0
460	Adhesion of Individual Attachment Setae of the Spider Cupiennius salei to Substrates With Different Roughness and Surface Energy. *Frontiers in Mechanical Engineering*, **2021**, 7,	2.6	1

459	Substrate Roughness Induced Wear Pattern in Gastropod Radulae. *Biotribology*, **2021**, 26, 100164	2.3	10
458	The damping and structural properties of dragonfly and damselfly wings during dynamic movement. *Communications Biology*, **2021**, 4, 737	6.7	1
457	Wing Coupling in Bees and Wasps: From the Underlying Science to Bioinspired Engineering. *Advanced Science*, **2021**, 8, e2004383	13.6	2
456	Dynamic iridescent signals of male copperwing damselflies coupled with wing-clapping displays: the perspective of different receivers. *Biological Journal of the Linnean Society*, **2021**, 134, 229-239	1.9	0
455	Insects use lubricants to minimize friction and wear in leg joints. *Proceedings of the Royal Society B: Biological Sciences*, **2021**, 288, 20211065	4.4	2
454	Mechanical property gradients of taenioglossan radular teeth are associated with specific function and ecological niche in Paludomidae (Gastropoda: Mollusca). *Acta Biomaterialia*, **2021**, 134, 513-530	10.8	4
453	Sisyphus and his rock: Quasi-random walk inspired by the motion of a ball transported by a dung beetle on combined terrain. *Journal of Theoretical Biology*, **2021**, 520, 110659	2.3	1
452	Cuticular modified air sacs underlie white coloration in the olive fruit fly, Bactrocera oleae. *Communications Biology*, **2021**, 4, 881	6.7	1
451	Reduction in Insect Attachment Caused by Different Nanomaterials Used as Particle Films (Kaolin, Zeolite, Calcium Carbonate). *Sustainability*, **2021**, 13, 8250	3.6	0
450	Mechanical properties of a female reproductive tract of a beetle and implications for penile penetration. *Proceedings of the Royal Society B: Biological Sciences*, **2021**, 288, 20211125	4.4	1
449	Against the wind: A load-bearing, yet durable, kite inspired by insect wings. *Materials and Design*, **2021**, 198, 109354	8.1	5
448	Long-term low friction maintenance and wear reduction on the ventral scales in snakes. *Materials Letters*, **2021**, 285, 129011	3.3	1
447	Functional diversity of attachment and grooming leg structures is retained in all but the smallest insects. *Journal of Zoology*, **2021**, 313, 99-113	2	2
446	Push and Pull: Biomechanics of the Pollination Apparatus of Oncidium spp.. *Frontiers in Mechanical Engineering*, **2021**, 6,	2.6	1
445	A controllable dual-catapult system inspired by the biomechanics of the dragonfly larvae's predatory strike. *Science Robotics*, **2021**, 6,	18.6	7
444	Attachment devices and the tarsal gland of the bug Coreus marginatus (Hemiptera: Coreidae). *Zoomorphology*, **2021**, 140, 85-102	1	2
443	Spiky-joint: a bioinspired solution to combine mobility and support. *Applied Physics A: Materials Science and Processing*, **2021**, 127, 1	2.6	1
442	Plant Seed Mucilage as a Glue: Adhesive Properties of Hydrated and Dried-in-Contact Seed Mucilage of Five Plant Species. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	2

441	Physical constraints lead to parallel evolution of micro- and nanostructures of animal adhesive pads: a review. *Beilstein Journal of Nanotechnology*, **2021**, 12, 725-743	3	3
440	Biomechanical strategies to reach a compromise between stiffness and flexibility in hind femora of desert locusts. *Acta Biomaterialia*, **2021**, 134, 490-498	10.8	0
439	Adhesive performance enhancement of the mushroom-shaped microstructured elastomer by atmospheric plasma treatment. *Biointerphases*, **2021**, 16, 041004	1.8	
438	Wing Coupling in Bees and Wasps: From the Underlying Science to Bioinspired Engineering (Adv. Sci. 16/2021). *Advanced Science*, **2021**, 8, 2170099	13.6	78
437	Collective effect of damage prevention in taenioglossan radular teeth is related to the ecological niche in Paludomidae (Gastropoda: Cerithioidea). *Acta Biomaterialia*, **2021**, 135, 458-472	10.8	3
436	Sand-throwing behaviour in pit-building antlion larvae: insights from finite-element modelling. *Journal of the Royal Society Interface*, **2021**, 18, 20210539	4.1	2
435	From the knitting shop: the first physical and dynamic model of the taenioglossan radula (Mollusca: Gastropoda) aids in unravelling functional principles of the radular morphology. *Journal of the Royal Society Interface*, **2021**, 18, 20210377	4.1	2
434	Mini Review: Comparison of Bio-Inspired Adhesive Feet of Climbing Robots on Smooth Vertical Surfaces. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 765718	5.8	2
433	Numerical model of the spatio-temporal dynamics in a water strider group. *Scientific Reports*, **2021**, 11, 18047	4.9	0
432	Specialized morphology and material properties make a honey bee tongue both extendible and structurally stable. *Acta Biomaterialia*, **2021**, 136, 412-419	10.8	1
431	Coupling wings with movable hooks - resilin in the wing-interlocking structures of honeybees. *Arthropod Structure and Development*, **2021**, 60, 101008	1.8	0
430	Powdery Mildew Fungus Erysiphe Alphitoides Turns Oak Leaf Surface to the Highly Hydrophobic State. *Biologically-inspired Systems*, **2021**, 171-185	0.7	1
429	Cell wall composition determines handedness reversal in helicoidal cellulose architectures of fruits.. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
428	Ontogenetic colour change of a sexual ornament in males of a damselfly: female mimicry, crypsis or both?. *Die Naturwissenschaften*, **2021**, 109, 2	2	
427	Material heterogeneity of male genitalia reduces genital damage in a bushcricket during sperm removal behaviour. *Die Naturwissenschaften*, **2020**, 107, 52	2	3
426	Distal leg structures of the Aculeata (Hymenoptera): A comparative evolutionary study of Sceliphron (Sphecidae) and Formica (Formicidae). *Journal of Morphology*, **2020**, 281, 737-753	1.6	5
425	Time-scale mechanical behaviors of locust semi-lunar process cuticles under power amplification for rapid movements. *Journal of Biomechanics*, **2020**, 104, 109742	2.9	0
424	Insect wing damage: causes, consequences and compensatory mechanisms. *Journal of Experimental Biology*, **2020**, 223,	3	16

423	Insect-inspired architecture to build sustainable cities. *Current Opinion in Insect Science*, **2020**, 40, 62-70	5.1	6
422	Biological adhesion in seagrasses: The role of substrate roughness in Posidonia oceanica (L.) Delile seedling anchorage via adhesive root hairs. *Marine Environmental Research*, **2020**, 160, 105012	3.3	8
421	Rules for the Leg Coordination of Dung Beetle Ball Rolling Behaviour. *Scientific Reports*, **2020**, 10, 9278	4.9	1
420	Structure and tensile properties of the forewing costal vein of the honeybee Apis mellifera. *Soft Matter*, **2020**, 16, 4057-4064	3.6	3
419	Role of Fruit Epicuticular Waxes in Preventing (Diptera: Tephritidae) Attachment in Different Cultivars of. *Insects*, **2020**, 11,	2.8	9
418	Humidity-Modulated Core–Shell Nanopillars for Enhancement of Gecko-Inspired Adhesion. *ACS Applied Nano Materials*, **2020**, 3, 3596-3603	5.6	10
417	Frictional properties of flower stems in the plant Hippeastrum reginae (Amaryllidaceae). *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	
416	Maximizing Friction by Passive Jamming. *Advanced Materials Interfaces*, **2020**, 7, 1901930	4.6	5
415	Role of Surface Chemistry in the Superhydrophobicity of the Springtail (Insecta:Collembola). *ACS Applied Materials & Interfaces*, **2020**, 12, 12294-12304	9.5	1
414	Mechanical ecology of fruit-insect interaction in the adult Mediterranean fruit fly Ceratitis capitata (Diptera: Tephritidae). *Zoology*, **2020**, 139, 125748	1.7	8
413	Biomechanical strategies underlying the durability of a wing-to-wing coupling mechanism. *Acta Biomaterialia*, **2020**, 110, 188-195	10.8	5
412	Entrapment of Bradysia paupera (Diptera: Sciaridae) by Phaseolus vulgaris (Fabaceae) plant leaf. *Arthropod-Plant Interactions*, **2020**, 14, 499-509	2.2	4
411	Kinematics of gecko climbing: the lateral undulation pattern. *Zoology*, **2020**, 140, 125768	1.7	1
410	Control strategies of gecko toe in response to reduced gravity. *Applied Sciences (Switzerland)*, **2020**, 10, 2257	2.6	1
409	Structure and Frictional Properties of the Leg Joint of the Beetle (Scarabaeidae, Cetoniinae) as an Inspiration for Technical Joints. *Biomimetics*, **2020**, 5,	3.7	1
408	The glue produced by for pupa adhesion is universal. *Journal of Experimental Biology*, **2020**, 223,	3	6
407	Nanoscale Pattern Formation in Biological Surfaces. *Biologically-inspired Systems*, **2020**, 235-273	0.7	
406	Porous silicone substrates inhibit permanent barnacle attachment under natural conditions. *Biointerphases*, **2020**, 15, 061013	1.8	0

405	Tightening it Up: Diversity of the Chitin Anchorage of Radular-Teeth in Paludomid Freshwater-Gastropods. *Malacologia*, **2020**, 63, 77	1.1	11
404	An Analysis by Synthesis Method that Allows Accurate Spatial Modeling of Thickness of Cortical Bone from Clinical QCT. *Lecture Notes in Computer Science*, **2020**, 641-651	0.9	
403	Wing wettability gradient in a damselfly (Odonata: Lestidae) reflects the submergence behaviour during underwater oviposition. *Royal Society Open Science*, **2020**, 7, 201258	3.3	0
402	Friction reduction mechanism of the cuticle surface in the sandhopper talitrus saltator (Amphipoda, talitridae). *Acta Biomaterialia*, **2020**, 101, 414-421	10.8	2
401	Attachment ability of females and males of the ladybird beetle Cryptolaemus montrouzieri to different artificial surfaces. *Journal of Insect Physiology*, **2020**, 121, 104011	2.4	3
400	Cuticle sclerotization determines the difference between the elastic moduli of locust tibiae. *Acta Biomaterialia*, **2020**, 103, 189-195	10.8	12
399	Finite element analysis of individual taenioglossan radular teeth (Mollusca). *Acta Biomaterialia*, **2020**, 115, 317-332	10.8	10
398	Not just scratching the surface: distinct radular motion patterns in Mollusca. *Biology Open*, **2020**, 9,	2.2	6
397	Air Retention under Water by the Floating Fern Salvinia: The Crucial Role of a Trapped Air Layer as a Pneumatic Spring. *Small*, **2020**, 16, e2003425	11	12
396	Variation of attachment ability of Nezara viridula (Hemiptera: Pentatomidae) during nymphal development and adult aging. *Journal of Insect Physiology*, **2020**, 127, 104117	2.4	1
395	Flexibility of intraoral food processing in the salamandrid newt : effects of environment and prey type. *Journal of Experimental Biology*, **2020**, 223,	3	2
394	Illuminating nature's beauty: modular, scalable and low-cost LED dome illumination system using 3D-printing technology. *Scientific Reports*, **2020**, 10, 12172	4.9	4
393	Incorporation of minor and trace elements into cultured brachiopods: Implications for proxy application with new insights from a biomineralisation model. *Geochimica Et Cosmochimica Acta*, **2020**, 286, 418-440	5.5	3
392	Adhesion Performance in the Eggs of the Philippine Leaf Insect (Phasmatodea: Phylliidae). *Insects*, **2020**, 11,	2.8	4
391	Attachment performance of stick insects (Phasmatodea) on convex substrates. *Journal of Experimental Biology*, **2020**, 223,	3	5
390	Multiple Mechanical Gradients are Responsible for the Strong Adhesion of Spider Attachment Hair. *Advanced Materials*, **2020**, 32, e2002758	24	6
389	Sucking or lapping: facultative feeding mechanisms in honeybees (). *Biology Letters*, **2020**, 16, 20200449	3.6	8
388	Comparison of tarsal attachment in two closely related leaf beetle species. *Journal of Insect Physiology*, **2020**, 127, 104158	2.4	1

387	Framework for Developing Bio-Inspired Morphologies for Walking Robots. *Applied Sciences (Switzerland)*, **2020**, 10, 6986	2.6	5
386	Resilin Distribution and Sexual Dimorphism in the Midge Antenna and Their Influence on Frequency Sensitivity. *Insects*, **2020**, 11,	2.8	1
385	Localization of Phenolic Compounds at an Air-Solid Interface in Plant Seed Mucilage: A Strategy to Maximize Its Biological Function?. *ACS Applied Materials & Interfaces*, **2020**, 12, 42531-42536	9.5	1
384	Bioinspired Adhesion: Multiple Mechanical Gradients are Responsible for the Strong Adhesion of Spider Attachment Hair (Adv. Mater. 37/2020). *Advanced Materials*, **2020**, 32, 2070280	24	
383	Structural colors with angle-insensitive optical properties generated by Morpho-inspired 2PP structures. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	6
382	Large River Effect or Frozen Kinetics: How Complex Nonlinear Living Systems Solve Optimization Problems. *Bulletin of Mathematical Biology*, **2020**, 82, 93	2.1	
381	A systematic investigation into the effect of fibrillar microstructures on the settlement and attachment strength of the bay barnacle Balanus improvisus under natural conditions. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	3
380	Functional significance of graded properties of insect cuticle supported by an evolutionary analysis. *Journal of the Royal Society Interface*, **2020**, 17, 20200378	4.1	7
379	The Influence of Material and Roughness on the Settlement and the Adhesive Strength of the Barnacle Balanus Improvisus in the Baltic Sea. *Frontiers in Marine Science*, **2020**, 7,	4.5	4
378	Multifunctional Adhesives on the Eggs of the Leaf Insect (Phasmatodea: Phylliidae): Solvent Influence and Biomimetic Implications. *Biomimetics*, **2020**, 5,	3.7	3
377	The contact separation force of the fruit burrs from five plant taxa dispersing by epizoochory. *Plant Biosystems*, **2020**, 154, 38-48	1.6	3
376	Kaolin nano-powder effect on insect attachment ability. *Journal of Pest Science*, **2020**, 93, 315-327	5.5	8
375	The role of mucilage envelope in the endozoochory of selected plant taxa. *Die Naturwissenschaften*, **2020**, 108, 2	2	5
374	Functional morphology of the sting in two digger wasps (Hymenoptera: Crabronidae) with different types of prey transport. *Arthropod Structure and Development*, **2019**, 52, 100882	1.8	2
373	Structure, properties and functions of the forewing-hindwing coupling of honeybees. *Journal of Insect Physiology*, **2019**, 118, 103936	2.4	9
372	Biomechanics of fore wing to hind wing coupling in the southern green stink bug Nezara viridula (Pentatomidae). *Acta Biomaterialia*, **2019**, 100, 10-17	10.8	5
371	Proteomic investigation of the blue mussel larval shell organic matrix. *Journal of Structural Biology*, **2019**, 208, 107385	3.4	6
370	Wing surface in the damselfly Mecistogaster ornata (Zygoptera, Pseudostigmatidae): interactions between nanoscale wax and sticky spider webs. *International Journal of Odonatology*, **2019**, 22, 51-57	0.5	2

369	Bioinspired 3D Printed Locomotion Devices Based on Anisotropic Friction. *Small*, **2019**, 15, e1802931	11	10
368	Local deformation and stiffness distribution in fly wings. *Biology Open*, **2019**, 8,	2.2	12
367	Mapping the Surface Microbiome and Metabolome of Brown Seaweed Fucus vesiculosus by Amplicon Sequencing, Integrated Metabolomics and Imaging Techniques. *Scientific Reports*, **2019**, 9, 1061	4.9	28
366	Aquatic Insects as a Source for Biomimetics **2019**, 401-426		1
365	Fresh "Pollen Adhesive" Weakens Humidity-Dependent Pollen Adhesion. *ACS Applied Materials & Interfaces*, **2019**, 11, 24691-24698	9.5	11
364	Material stiffness variation in mosquito antennae. *Journal of the Royal Society Interface*, **2019**, 16, 20190049	4.1	8
363	Dandelion diaspore dispersal: frictional anisotropy of cypselae of Taraxacum officinale enhances their interlocking with the soil. *Plant and Soil*, **2019**, 440, 399-408	4.2	4
362	Measurement error in μCT-based three-dimensional geometric morphometrics introduced by surface generation and landmark data acquisition. *Journal of Anatomy*, **2019**, 235, 357-378	2.9	7
361	Amblypygid-fungal interactions: The whip spider exoskeleton as a substrate for fungal growth. *Fungal Biology*, **2019**, 123, 497-506	2.8	3
360	Mechanical behavior of ctenoid scales: Joint-like structures control the deformability of the scales in the flatfish Solea solea (Pleuronectiformes). *Acta Biomaterialia*, **2019**, 92, 305-314	10.8	3
359	Experimental testing of self-healing ability of soft polymer materials. *Meccanica*, **2019**, 54, 1959-1970	2.1	3
358	Hierarchical architecture of spider attachment setae reconstructed from scanning nanofocus X-ray diffraction data. *Journal of the Royal Society Interface*, **2019**, 16, 20180692	4.1	8
357	Biomechanical properties of fishing lines of the glowworm Arachnocampa luminosa (Diptera; Keroplatidae). *Scientific Reports*, **2019**, 9, 3082	4.9	7
356	Body temperatures in Sympecma paedisca (Zygoptera, Lestidae) in the autumn in the Central Ukraine. *International Journal of Odonatology*, **2019**, 22, 95-100	0.5	
355	Stiffness gradients facilitate ovipositor bending and spatial probing control in a parasitic wasp. *Journal of Experimental Biology*, **2019**, 222,	3	5
354	Adjustment of triple shellac coating for precise release of bioactive substances with different physico-chemical properties in the ileocolonic region. *International Journal of Pharmaceutics*, **2019**, 564, 472-484	6.5	4
353	Porous substrate affects a subsequent attachment ability of the beetle Harmonia axyridis (Coleoptera, Coccinellidae). *Journal of the Royal Society Interface*, **2019**, 16, 20180696	4.1	8
352	Ultrastructure of spider thread anchorages. *Journal of Morphology*, **2019**, 280, 534-543	1.6	8

351	Frequency of plant visits by the generalist ant Lasius niger depends on the surface microstructure of plant stems. *Arthropod-Plant Interactions*, **2019**, 13, 311-320	2.2	6
350	The thoracic anatomy of the swift louseflyCrataerina pallida(Diptera)Functional implications and character evolution in Hippoboscoidea. *Zoological Journal of the Linnean Society*, **2019**, 185, 111-131	2.4	1
349	Attachment-based mechanisms underlying capture and release of pollen grains. *Journal of the Royal Society Interface*, **2019**, 16, 20190269	4.1	8
348	Sperm transfer through hyper-elongated beetle penises - morphology and theoretical approaches. *Scientific Reports*, **2019**, 9, 10238	4.9	3
347	Adaptations of dragonfly larvae and their exuviae (Insecta: Odonata), attachment devices and their crucial role during emergence. *Journal of Insect Physiology*, **2019**, 117, 103914	2.4	4
346	On the fracture resistance of dragonfly wings. *Journal of the Mechanical Behavior of Biomedical Materials*, **2019**, 99, 127-133	4.1	10
345	Compromise between mechanical and chemical protection mechanisms in the shell. *Journal of Experimental Biology*, **2019**, 222,	3	2
344	In slow motion: radula motion pattern and forces exerted to the substrate in the land snail (Mollusca, Gastropoda) during feeding. *Royal Society Open Science*, **2019**, 6, 190222	3.3	13
343	Egg-laying job makes males hot: body temperature measurements in egg-laying tandems of the dragonfly Sympetrum vulgatum using IR camera. *Die Naturwissenschaften*, **2019**, 106, 40	2	1
342	The insect unguitractor plate in action: Force transmission and the micro CT visualizations of inner structures. *Journal of Insect Physiology*, **2019**, 117, 103908	2.4	3
341	NEXAFS imaging to characterize the physio-chemical composition of cuticle from African Flower Scarab Eudicella gralli. *Nature Communications*, **2019**, 10, 4758	17.4	3
340	Structural coloration predicts the outcome of male contests in the Amazonian damselfly Chalcopteryx scintillans (Odonata: Polythoridae). *Arthropod Structure and Development*, **2019**, 53, 100884	1.8	6
339	Differences in the Young modulus and hardness reflect different functions of teeth within the taenioglossan radula of gastropods. *Zoology*, **2019**, 137, 125713	1.7	17
338	Depth-Sensing Indentation as a Micro- and Nanomechanical Approach to Characterisation of Mechanical Properties of Soft, Biological, and Biomimetic Materials. *Nanomaterials*, **2019**, 10,	5.4	6
337	Anchoring of greenhouse whitefly eggs on different rose cultivars. *Arthropod-Plant Interactions*, **2019**, 13, 335-348	2.2	2
336	Pressure-induced silk spinning mechanism in webspinners (Insecta: Embioptera). *Soft Matter*, **2019**, 15, 9742-9750	3.6	9
335	Endocuticle sclerotisation increases the mechanical stability of cuticle. *Soft Matter*, **2019**, 15, 8272-8278	3.6	14
334	Complementary effect of attachment devices in stick insects (Phasmatodea). *Journal of Experimental Biology*, **2019**, 222,	3	13

333	Inter- and intraspecific differences in leaf beetle attachment on rigid and compliant substrates. *Journal of Zoology*, **2019**, 307, 1-8	2	4
332	On the thoracic anatomy of the Madagascan Heterogyrus milloti and the phylogeny of Gyrinidae (Coleoptera). *Systematic Entomology*, **2019**, 44, 336-360	3.4	7
331	3D printing of bioinspired topographically oriented surfaces with frictional anisotropy for directional driving. *Tribology International*, **2019**, 132, 99-107	4.9	13
330	Anisotropic Friction: Bioinspired 3D Printed Locomotion Devices Based on Anisotropic Friction (Small 1/2019). *Small*, **2019**, 15, 1970005	11	3
329	"Cylindrical worlds" in biology: Does the aggregation strategy give a selective advantage?. *BioSystems*, **2019**, 175, 39-46	1.9	3
328	Estimation of the elastic modulus and the work of adhesion of soft materials using the extended Borodich□Galanov (BG) method and depth sensing indentation. *Mechanics of Materials*, **2019**, 129, 198-213	3.3	8
327	Structure and biomechanics of the antennal grooming mechanism in the southern green stink bug Nezara viridula. *Journal of Insect Physiology*, **2019**, 112, 57-67	2.4	6
326	Traction reinforcement in prehensile feet of harvestmen (Arachnida, Opiliones). *Journal of Experimental Biology*, **2019**, 222,	3	1
325	Tarsal attachment devices of the southern green stink bug Nezara viridula (Heteroptera: Pentatomidae). *Journal of Morphology*, **2018**, 279, 660-672	1.6	18
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