Armin P Moczek

List of Publications by Year
in descending order

100 papers	6,544 citations	116194 36 h-index	78623 77 g-index
103 all docs	103 docs citations	103 times ranked	5800 citing authors

#	Article	IF	Citations
1	Evaluating old truths: Final adult size in holometabolous insects is set by the end of larval development. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2023, 340, 270-276.	0.6	2
2	When the end modifies its means: the origins of novelty and the evolution of innovation. Biological Journal of the Linnean Society, 2023, 139, 433-440.	0.7	6
3	Bridging the explanatory gaps: What can we learn from a biological agency perspective?. BioEssays, 2022, 44, e2100185.	1.2	38
4	Incipient hybrid inferiority between recently introduced, diverging dung beetle populations. Biological Journal of the Linnean Society, 2021, 132, 931-944.	0.7	9
5	Wing serial homologues and the diversification of insect outgrowths: insights from the pupae of scarab beetles. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20202828.	1.2	9
6	Signals of selection beyond bottlenecks between exotic populations of the bullâ€headed dung beetle, Onthophagus taurus. Evolution & Development, 2021, 23, 86-99.	1.1	0
7	Reciprocal microbiome transplants differentially rescue fitness in two syntopic dung beetle sister species (Scarabaeidae: Onthophagus). Ecological Entomology, 2021, 46, 946-954.	1.1	14
8	Doublesexmediates species-, sex-, environment- and trait-specific exaggeration of size and shape. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210241.	1.2	12
9	Evolutionary and plastic variation in larval growth and digestion reveal the complex underpinnings of size and age at maturation in dung beetles. Ecology and Evolution, 2021, 11, 15098-15110.	0.8	15
10	Developmental bias in horned dung beetles and its contributions to innovation, adaptation, and resilience. Evolution & Development, 2020, 22, 165-180.	1.1	16
11	Biases in the study of developmental bias. Evolution & Development, 2020, 22, 3-6.	1.1	1
12	Serotonin differentially affects morph-specific behavior in divergent populations of a horned beetle. Behavioral Ecology, 2020, 31, 352-360.	1.0	3
13	From descent with modification to the origins of novelty. Zoology, 2020, 143, 125836.	0.6	4
14	Serotonin signaling suppresses the nutritionâ€responsive induction of an alternate male morph in horn polyphenic beetles. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 660-669.	0.9	2
15	Evolution and plasticity of morphâ€specific integration in the bullâ€headed dung beetle Onthophagus taurus. Ecology and Evolution, 2020, 10, 10558-10570.	0.8	8
16	Maternal and larval niche construction interact to shape development, survival, and population divergence in the dung beetle Onthophagus taurus. Evolution & Development, 2020, 22, 358-369.	1.1	8
17	Donâ€™t stand so close to me: Microbiotaâ€facilitated enemy release dynamics in introduced Onthophagus taurus dung beetles. Ecology and Evolution, 2020, 10, 13640-13648.	0.8	8
18	The oncometabolite L-2-hydroxyglutarate is a common product of dipteran larval development. Insect Biochemistry and Molecular Biology, 2020, 127, 103493.	1.2	7

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19	Nutrition-responsive gene expression and the developmental evolution of insect polyphenism. Nature Ecology and Evolution, 2020, 4, 970-978.	3.4	24
20	Rapid differentiation of plasticity in life history and morphology during invasive range expansion and concurrent local adaptation in the horned beetleOnthophagus taurus. Evolution; International Journal of Organic Evolution, 2020, 74, 2059-2072.	1.1	23
21	Comparing first- and third-person perspectives in early elementary learning of honeybee systems. Instructional Science, 2020, 48, 291-312.	1.1	7
22	Notch signaling patterns head horn shape in the bull-headed dung beetle Onthophagus taurus. Development Genes and Evolution, 2020, 230, 213-225.	0.4	11
23	(My Microbiome) Would Walk 10,000Âmiles: Maintenance and Turnover of Microbial Communities in Introduced Dung Beetles. Microbial Ecology, 2020, 80, 435-446.	1.4	27
24	Integrating evolutionarily novel horns within the deeply conserved insect head. BMC Biology, 2020, 18, 41.	1.7	8
25	Evolution of, and via, Developmental Plasticity: Insights through the Study of Scaling Relationships. Integrative and Comparative Biology, 2019, 59, 1346-1355.	0.9	15
26	The origins of novelty from within the confines of homology: the developmental evolution of the digging tibia of dung beetles. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182427.	1.2	13
27	Beetle horns evolved from wing serial homologs. Science, 2019, 366, 1004-1007.	6.0	50
28	Transgenerational developmental effects of speciesâ€specific, maternally transmitted microbiota in Onthophagus dung beetles. Ecological Entomology, 2019, 44, 274-282.	1.1	33
29	The role of ancestral phenotypic plasticity in evolutionary diversification: population density effects in horned beetles. Animal Behaviour, 2018, 137, 53-61.	0.8	31
30	Adaptive maternal behavioral plasticity and developmental programming mitigate the transgenerational effects of temperature in dung beetles. Oikos, 2018, 127, 1319-1329.	1.2	38
31	The evolution of relative trait size and shape: insights from the genitalia of dung beetles. Development Genes and Evolution, 2018, 228, 83-93.	0.4	9
32	Insulin signalling's role in mediating tissue-specific nutritional plasticity and robustness in the horn-polyphenic beetle Onthophagus taurus. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20181631.	1.2	41
33	Diplogastrellus nematodes are sexually transmitted mutualists that alter the bacterial and fungal communities of their beetle host. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10696-10701.	3.3	16
34	Developmental Bias and Evolution: A Regulatory Network Perspective. Genetics, 2018, 209, 949-966.	1.2	146
35	Developmental regulation and evolution of scaling: novel insights through the study of Onthophagus beetles. Current Opinion in Insect Science, 2017, 19, 52-60.	2.2	21
36	Evidence of developmental niche construction in dung beetles: effects on growth, scaling and reproductive success. Ecology Letters, 2017, 20, 1353-1363.	3.0	31

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37	doublesex alters aggressiveness as a function of social context and sex in the polyphenic beetle Onthophagus taurus. Animal Behaviour, 2017, 132, 261-269.	0.8	12
38	Development of functional ectopic compound eyes in scarabaeid beetles by knockdown of orthodenticle. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12021-12026.	3.3	12
39	Contextualized niche shifts upon independent invasions by the dung beetle Onthophagus taurus. Biological Invasions, 2016, 18, 3137-3148.	1.2	48
40	Nutrient Stress During Ontogeny Alters Patterns of Resource Allocation in two Species of Horned Beetles. Journal of Experimental Zoology, 2016, 325, 481-490.	1.2	5
41	Hedgehog signaling enables nutrition-responsive inhibition of an alternative morph in a polyphenic beetle. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5982-5987.	3.3	53
42	Conservation, Innovation, and Bias: Embryonic Segment Boundaries Position Posterior, but Not Anterior, Head Horns in Adult Beetles. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2016, 326, 271-279.	0.6	11
43	Rapid Divergence of Nesting Depth and Digging Appendages among Tunneling Dung Beetle Populations and Species. American Naturalist, 2016, 187, E143-E151.	1.0	40
44	Neofunctionalization of embryonic head patterning genes facilitates the positioning of novel traits on the dorsal head of adult beetles. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160824.	1.2	17
45	Genome of the Asian longhorned beetle (Anoplophora glabripennis), a globally significant invasive species, reveals key functional and evolutionary innovations at the beetleâ€“plant interface. Genome Biology, 2016, 17, 227.	3.8	244
46	Developmental and Ecological Benefits of the Maternally Transmitted Microbiota in a Dung Beetle. American Naturalist, 2016, 188, 679-692.	1.0	59
47	Effects of parental care on the accumulation and release of cryptic genetic variation: review of mechanisms and a case study of dung beetles. Evolutionary Ecology, 2016, 30, 251-265.	0.5	29
48	The transcriptomic basis of tissueâ€•and nutritionâ€dependent sexual dimorphism in the beetle Onthophagus taurus. Ecology and Evolution, 2016, 6, 1601-1613.	0.8	18
49	Appendageâ€patterning genes regulate male and female copulatory structures in horned beetles. Evolution & Development, 2015, 17, 248-253.	1.1	11
50	Differentiation of ovarian development and the evolution of fecundity in rapidly diverging exotic beetle populations. Journal of Experimental Zoology, 2015, 323, 679-688.	1.2	13
51	The extended evolutionary synthesis: its structure, assumptions and predictions. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151019.	1.2	755
52	The significance and scope of evolutionary developmental biology: a vision for the 21st century. Evolution & Development, 2015, 17, 198-219.	1.1	92
53	A combination of developmental plasticity, parental effects, and genetic differentiation mediates divergences in life history traits between dung beetle populations. Evolution & Development, 2015, 17, 148-159.	1.1	22
54	Evolutionary and Ecological Genomics of Developmental Plasticity: Novel Approaches and First Insights From the Study of Horned Beetles. Advances in Experimental Medicine and Biology, 2014, 781, 127-148.	0.8	4

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55	The nutritionally responsive transcriptome of the polyphenic beetle Onthophagus taurus and the importance of sexual dimorphism and body region. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20142084.	1.2	29
56	Resource allocation during ontogeny is influenced by genetic, developmental and ecological factors in the horned beetle, Onthophagus taurus. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20141625.	1.2	8
57	Development and evolution of insect polyphenisms: novel insights through the study of sex determination mechanisms. Current Opinion in Insect Science, 2014, 1, 52-58.	2.2	11
58	Beetle horns and horned beetles: emerging models in developmental evolution and ecology. Wiley Interdisciplinary Reviews: Developmental Biology, 2013, 2, 405-418.	5.9	38
59	Brood Ball-Mediated Transmission of Microbiome Members in the Dung Beetle, Onthophagus taurus (Coleoptera: Scarabaeidae). PLoS ONE, 2013, 8, e79061.	1.1	82
60	Diversification of doublesex function underlies morph-, sex-, and species-specific development of beetle horns. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20526-20531.	3.3	151
61	Insulin Signaling as a Mechanism Underlying Developmental Plasticity: The Role of FOXO in a Nutritional Polyphenism. PLoS ONE, 2012, 7, e34857.	1.1	57
62	pangolin expression influences the development of a morphological novelty: Beetle horns. Genesis, 2012, 50, 404-414.	0.8	12
63	The Nature of Nurture and the Future of Evodevo: Toward a Theory of Developmental Evolution. Integrative and Comparative Biology, 2012, 52, 108-119.	0.9	46
64	Shape - but Not Size - Codivergence between Male and Female Copulatory Structures in Onthophagus Beetles. PLoS ONE, 2011, 6, e28893.	1.1	35
65	DEVELOPMENTAL DECOUPLING OF ALTERNATIVE PHENOTYPES: INSIGHTS FROM THE TRANSCRIPTOMES OF HORN-POLYPHENIC BEETLES. Evolution; International Journal of Organic Evolution, 2011, 65, 231-245.	1.1	78
66	The origins of novelty. Nature, 2011, 473, 34-35.	13.7	10
67	The role of developmental plasticity in evolutionary innovation. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 2705-2713.	1.2	432
68	Decapentaplegic (dpp) regulates the growth of a morphological novelty, beetle horns. Development Genes and Evolution, 2011, 221, 17-27.	0.4	31
69	Gene discovery in the horned beetle Onthophagus taurus. BMC Genomics, 2010, 11, 703.	1.2	40
70	Beetle horns are regulated by the Hox gene, Sex combs reduced, in a speciesâ€•and sexâ€specific manner. Evolution & Development, 2010, 12, 353-362.	1.1	62
71	Programed cell death shapes the expression of horns within and between species of horned beetles. Evolution & Development, 2010, 12, 449-458.	1.1	38
72	Phenotypic plasticity and diversity in insects. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 593-603.	1.8	146

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73	Phenotypic plasticity's impacts on diversification and speciation. Trends in Ecology and Evolution, 2010, 25, 459-467.	4.2	961
74	Differential recruitment of limb patterning genes during development and diversification of beetle horns. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8992-8997.	3.3	173
75	EST and microarray analysis of horn development in Onthophagus beetles. BMC Genomics, 2009, 10, 504.	1.2	38
76	Endless forms most strange: a review of The Superorganism: the Beauty, Elegance, and Strangeness of Insect Societies, by Bert HÃ¶lldobler and Edward O. Wilson. Evolution & Development, 2009, 11, 754-756.	1.1	2
77	Chapter 6 The Origin and Diversification of Complex Traits Through Microâ€•and Macroevolution of Development. Current Topics in Developmental Biology, 2009, 86, 135-162.	1.0	10
78	On the origins of novelty in development and evolution. BioEssays, 2008, 30, 432-447.	1.2	230
79	RAPID ANTAGONISTIC COEVOLUTION BETWEEN PRIMARY AND SECONDARY SEXUAL CHARACTERS IN HORNED BEETLES. Evolution; International Journal of Organic Evolution, 2008, 62, 2423-2428.	1.1	52
80	The basis of beeâ€ing different: the role of gene silencing in plasticity. Evolution & Development, 2008, 10, 511-513.	1.1	31
81	Juvenile hormone mediates sexual dimorphism in horned beetles. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2007, 308B, 417-427.	0.6	31
82	Developmental capacitance, genetic accommodation, and adaptive evolution. Evolution & Development, 2007, 9, 299-305.	1.1	80
83	Emerging model systems in evoâ€devo: horned beetles and the origins of diversity. Evolution & Development, 2007, 9, 323-328.	1.1	20
84	Pupal remodeling and the evolution and development of alternative male morphologies in horned beetles. BMC Evolutionary Biology, 2007, 7, 151.	3.2	23
85	WHEN ONTOGENY REVEALS WHAT PHYLOGENY HIDES: GAIN AND LOSS OF HORNS DURING DEVELOPMENT AND EVOLUTION OF HORNED BEETLES. Evolution; International Journal of Organic Evolution, 2006, 60, 2329-2341.	1.1	63
86	The origins of diversity: A review of Evolution of the Insects, by David Grimaldi and Michael S. Engel. Evolution & Development, 2006, 8, 111-112.	1.1	0
87	Conservation, innovation, and the evolution of horned beetle diversity. Development Genes and Evolution, 2006, 216, 655-665.	0.4	50
88	Pupal Remodeling and the Development and Evolution of Sexual Dimorphism in Horned Beetles. American Naturalist, 2006, 168, 711-729.	1.0	60
89	A Matter of Measurements: Challenges and Approaches in the Comparative Analysis of Static Allometries. American Naturalist, 2006, 167, 606-611.	1.0	23
90	Horn possession reduces maneuverability in the horn-polyphenic beetle, Onthophagus nigriventris. Journal of Insect Science, 2006, 6, 1-10.	0.6	31

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91	Intraspecific female brood parasitism in the dung beetleOnthophagus taurus. Ecological Entomology, 2006, 31, 316-321.	1.1	17
92	When ontogeny reveals what phylogeny hides: gain and loss of horns during development and evolution of horned beetles. Evolution; International Journal of Organic Evolution, 2006, 60, 2329-41.	1.1	21
93	Diverse developmental mechanisms contribute to different levels of diversity in horned beetles. Evolution & Development, 2005, 7, 175-185.	1.1	137
94	Tradeâ€offs during the Development of Primary and Secondary Sexual Traits in a Horned Beetle. American Naturalist, 2004, 163, 184-191.	1.0	143
95	Rapid evolution of a polyphenic threshold. Evolution & Development, 2003, 5, 259-268.	1.1	133
96	Allometric plasticity in a polyphenic beetle. Ecological Entomology, 2002, 27, 58-67.	1.1	54
97	A Method for Sexing Final Instar Larvae of the Genus Onthophagus Latreille (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	0.1	22
98	Developmental mechanisms of threshold evolution in a polyphenic beetle. Evolution & Development, 2002, 4, 252-264.	1.1	125
99	Food availability controls the onset of metamorphosis in the dung beetleOnthophagus taurus(Coleoptera: Scarabaeidae). Physiological Entomology, 2001, 26, 173-180.	0.6	162
100	Male horn dimorphism in the scarab beetle, Onthophagus taurus: do alternative reproductive tactics favour alternative phenotypes?. Animal Behaviour, 2000, 59, 459-466.	0.8	381