

# Aimy Wissa

## List of Publications by Year in descending order

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Version: 2024-02-01

34  
papers

296  
citations

1039880

9  
h-index

996849

15  
g-index

34  
all docs

34  
docs citations

34  
times ranked

209  
citing authors

#	ARTICLE	IF	CITATIONS
1	Passively morphing ornithopter wings constructed using a novel compliant spine: design and testing. <i>Smart Materials and Structures</i> , 2012, 21, 094028.	1.8	30
2	Bioinspired wingtip devices: a pathway to improve aerodynamic performance during low Reynolds number flight. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 036003.	1.5	27
3	Latching of the click beetle (Coleoptera: Elateridae) thoracic hinge enabled by the morphology and mechanics of conformal structures. <i>Journal of Experimental Biology</i> , 2019, 222, .	0.8	27
4	Nonlinear elasticity and damping govern ultrafast dynamics in click beetles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	24
5	Design and Optimization of a Contact-Aided Compliant Mechanism for Passive Bending. <i>Journal of Mechanisms and Robotics</i> , 2014, 6, .	1.5	21
6	The function of the alula on engineered wings: a detailed experimental investigation of a bioinspired leading-edge device. <i>Bioinspiration and Biomimetics</i> , 2019, 14, 056015.	1.5	21
7	Design and optimization of a bend-and-sweep compliant mechanism. <i>Smart Materials and Structures</i> , 2013, 22, 094019.	1.8	16
8	Model-based design of a multistable origami-enabled crawling robot. <i>Smart Materials and Structures</i> , 2020, 29, 015013.	1.8	16
9	Free Flight Testing and Performance Evaluation of a Passively Morphing Ornithopter. <i>International Journal of Micro Air Vehicles</i> , 2015, 7, 21-40.	1.0	10
10	Covert-inspired flaps for lift enhancement and stall mitigation. <i>Bioinspiration and Biomimetics</i> , 2021, 16, .	1.5	10
11	Pop! Observing and Modeling the Legless Self-righting Jumping Mechanism of Click Beetles. <i>Lecture Notes in Computer Science</i> , 2017, , 35-47.	1.0	10
12	Design of a Passively Morphing Ornithopter Wing Using a Novel Compliant Spine. , 2010, , .		9
13	Analytical model and stability analysis of the leading edge spar of a passively morphing ornithopter wing. <i>Bioinspiration and Biomimetics</i> , 2015, 10, 065003.	1.5	9
14	Testing of Novel Compliant Spines for Passive Wing Morphing. , 2011, , .		8
15	Wings of a Feather Stick Together: Morphing Wings with Barbule-Inspired Latching. <i>Lecture Notes in Computer Science</i> , 2015, , 123-134.	1.0	8
16	Flight Testing of Novel Compliant Spines for Passive Wing Morphing on Ornithopters. , 2013, , .		7
17	Design Optimization of a Compliant Spine for Dynamic Applications. , 2011, , .		6
18	Design optimization of a twist compliant mechanism with nonlinear stiffness. <i>Smart Materials and Structures</i> , 2014, 23, 104010.	1.8	6

#	ARTICLE	IF	CITATIONS
19	A Metameric Crawling Robot Enabled by Origami and Smart Materials. , 2017, , .		4
20	Design Optimization of a Covert Feather-Inspired Deployable Structure for Increased Lift. , 2018, , .		4
21	Design Optimization of a Twist Compliant Mechanism With Nonlinear Stiffness. , 2013, , .		3
22	Numerical and Experimental Study of a Covert-Inspired Passively Deployable Flap for Aerodynamic Lift Enhancement. , 2022, , .		3
23	Design of Bend-and-Sweep Compliant Mechanism for Passive Shape Change. , 2012, , .		2
24	Optimization of a Bend-Twist-and-Sweep Compliant Mechanism. , 2014, , .		2
25	Inertial Effects Due to Passive Wing Morphing in Ornithopters. , 2014, , .		2
26	Path Following for the Soft Origami Crawling Robot. , 2019, , .		2
27	Dynamic characterization of a bio-inspired variable stiffness multi-winglet device. , 2020, , .		2
28	Robust Design and Evaluation of a Novel Modular Origami-Enabled Mobile Robot (OSCAR). Journal of Mechanisms and Robotics, 2023, 15, .	1.5	2
29	Addressing Diverse Motivations to Enable Bioinspired Design. Integrative and Comparative Biology, 2022, 62, 1192-1201.	0.9	2
30	Design and Optimization of a Bend-and-Sweep Compliant Mechanism. , 2013, , .		1
31	Stability Analysis of the Wing Leading Edge Spar of a Passively Morphing Ornithopter. , 2014, , .		1
32	Adaptive and compliant wingtip devices enabled by additive manufacturing and multistable structures. , 2019, , .		1
33	Adaptive and active materials: selected papers from the ASME 2015 Conference on Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS 15) (Colorado Springs, CO, USA, 21â€“23 September) Tj ETQn\$ 1 0.784314 rgB		
34	Recent advances in adaptive and active materials 2016. Smart Materials and Structures, 2017, 26, 090201.	1.8	0