

Julien R Serres

List of Publications by Year in descending order

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Version: 2024-02-01

45
papers

1,077
citations

567281

15
h-index

552781

26
g-index

52
all docs

52
docs citations

52
times ranked

805
citing authors

#	ARTICLE	IF	CITATIONS
1	A Bio-Inspired Flying Robot Sheds Light on Insect Piloting Abilities. <i>Current Biology</i> , 2007, 17, 329-335.	3.9	157
2	Fast reproducible identification and large-scale databasing of individual functional cognitive networks. <i>BMC Neuroscience</i> , 2007, 8, 91.	1.9	112
3	Optic flow-based collision-free strategies: From insects to robots. <i>Arthropod Structure and Development</i> , 2017, 46, 703-717.	1.4	112
4	AntBot: A six-legged walking robot able to home like desert ants in outdoor environments. <i>Science Robotics</i> , 2019, 4, .	17.6	97
5	A vision-based autopilot for a miniature air vehicle: joint speed control and lateral obstacle avoidance. <i>Autonomous Robots</i> , 2008, 25, 103-122.	4.8	80
6	A bee in the corridor: centering and wall-following. <i>Die Naturwissenschaften</i> , 2008, 95, 1181-1187.	1.6	68
7	Compact and high performance wind actuated venturi triboelectric energy harvester. <i>Nano Energy</i> , 2019, 62, 449-457.	16.0	46
8	An ant-inspired celestial compass applied to autonomous outdoor robot navigation. <i>Robotics and Autonomous Systems</i> , 2019, 117, 40-56.	5.1	42
9	Toward Optic Flow Regulation for Wall-Following and Centring Behaviours. <i>International Journal of Advanced Robotic Systems</i> , 2006, 3, 23.	2.1	39
10	Modelling honeybee visual guidance in a 3-D environment. <i>Journal of Physiology (Paris)</i> , 2010, 104, 27-39.	2.1	34
11	Insect-Inspired Robots: Bridging Biological and Artificial Systems. <i>Sensors</i> , 2021, 21, 7609.	3.8	32
12	A biomimetic vision-based hovercraft accounts for bees' complex behaviour in various corridors. <i>Bioinspiration and Biomimetics</i> , 2014, 9, 036003.	2.9	28
13	Altitude control in honeybees: joint vision-based learning and guidance. <i>Scientific Reports</i> , 2017, 7, 9231.	3.3	26
14	Polarized skylight-based heading measurements: a bio-inspired approach. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20180878.	3.4	25
15	Optic flow cues help explain altitude control over sea in freely flying gulls. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190486.	3.4	16
16	Optic Flow Based Visual Guidance: From Flying Insects to Miniature Aerial Vehicles. , 0, , .		15
17	Time-of-Travel Methods for Measuring Optical Flow on Board a Micro Flying Robot. <i>Sensors</i> , 2017, 17, 571.	3.8	15
18	A novel insect-inspired optical compass sensor for a hexapod walking robot. , 2017, , .		14

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19	A bio-inspired celestial compass applied to an ant-inspired robot for autonomous navigation. , 2017, , .		13
20	Biomimetic Autopilot Based on Minimalistic Motion Vision for Navigating along Corridors Comprising U-shaped and S-shaped Turns. Journal of Bionic Engineering, 2015, 12, 47-60.	5.0	12
21	Insect-inspired vision for autonomous vehicles. Current Opinion in Insect Science, 2018, 30, 46-51.	4.4	12
22	A fully-autonomous hovercraft inspired by bees: Wall following and speed control in straight and tapered corridors. , 2012, , .		11
23	Two optic flow regulators for speed control and obstacle avoidance. , 0, , .		9
24	Neuromimetic Robots Inspired by Insect Vision. Advances in Science and Technology, 2008, 58, 127-136.	0.2	8
25	Toward an insect-inspired event-based autopilot combining both visual and control events. , 2017, , .		5
26	A Hexapod Walking Robot Mimicking Navigation Strategies of Desert Ants Cataglyphis. Lecture Notes in Computer Science, 2018, , 145-156.	1.3	5
27	A 3D insect-inspired visual autopilot for corridor-following. , 2008, , .		4
28	Combining sound and optic flow cues to reach a sound source despite lateral obstacles. , 2008, , .		4
29	Ecological Entomology: How Is Gibson's Framework Useful?. Insects, 2021, 12, 1075.	2.2	4
30	A quasi-panoramic bio-inspired eye for flying parallel to walls. , 2017, , .		3
31	M ² APix: A Bio-Inspired Auto-Adaptive Visual Sensor for Robust Ground Height Estimation. , 2018, , .		3
32	Ecological design of augmentation improves helicopter ship landing maneuvers: An approach in augmented virtuality. PLoS ONE, 2021, 16, e0255779.	2.5	3
33	Optic Flow Based Autopilots: Speed Control and Obstacle Avoidance. , 2009, , 29-50.		3
34	Insect Inspired Autopilots. Journal of Aero Aqua Bio-mechanisms, 2010, 1, 2-10.	1.0	3
35	Floor and ceiling mirror configurations to study altitude control in honeybees. Biology Letters, 2022, 18, 20210534.	2.3	3
36	Event-based visual guidance inspired by honeybees in a 3D tapered tunnel. , 2016, , .		2

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37	Bio-inspired celestial compass yields new opportunities for urban localization. , 2020, , .		2
38	Helicopter Pilots Synchronize Their Altitude with Ship Heave to Minimize Energy When Landing on a Ship's Deck. International Journal of Aerospace Psychology, 2021, 31, 135-148.	0.9	2
39	INSECT INSPIRED VISUAL MOTION SENSING AND FLYING ROBOTS. World Scientific Series in Nanoscience and Nanotechnology, 2014, , 565-611.	0.1	1
40	Field Programmable Gate Array (FPGA) for Bio-Inspired Visuo-Motor Control Systems Applied to Micro-Air Vehicles. , 2009, , .		0
41	Taking Inspiration from Flying Insects to Navigate inside Buildings. , 2018, , .		0
42	Insect-inspired omnidirectional vision for autonomous localization on-board a hexapod robot. , 2020, , .		0
43	Aerial Navigation and Optic Flow Sensing A Biorobotic Approach. , 2010, , 451-477.		0
44	AntBot is able to go home like desert ants. TheScienceBreaker, 2019, 05, .	0.0	0
45	Le robot fourmi AntBot. Techniques and Culture, 2020, , 128-141.	0.1	0