

# Patrick Flammang

## List of Publications by Year in descending order

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103  
papers

2,790  
citations

172457

29  
h-index

243625

44  
g-index

110  
all docs

110  
docs citations

110  
times ranked

2239  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adhesion of echinoderm tube feet to rough surfaces. <i>Journal of Experimental Biology</i> , 2005, 208, 2555-2567.	1.7	109
2	Antifouling diketopiperazines produced by a deep-sea bacterium, <i>Streptomyces fungicidicus</i> . <i>Biofouling</i> , 2006, 22, 187-194.	2.2	109
3	Qualitative and Quantitative Saponin Contents in Five Sea Cucumbers from the Indian Ocean. <i>Marine Drugs</i> , 2010, 8, 173-189.	4.6	109
4	Experimental strategies for the identification and characterization of adhesive proteins in animals: a review. <i>Interface Focus</i> , 2015, 5, 20140064.	3.0	79
5	Sea star tenacity mediated by a protein that fragments, then aggregates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6317-6322.	7.1	76
6	The triterpene glycosides of <i>Holothuria forskali</i> : usefulness and efficiency as a chemical defense mechanism against predatory fish. <i>Journal of Experimental Biology</i> , 2011, 214, 1347-1356.	1.7	70
7	First Insights into the Biochemistry of Tube Foot Adhesive from the Sea Urchin <i>Paracentrotus lividus</i> (Echinoidea, Echinodermata). <i>Marine Biotechnology</i> , 2009, 11, 686-698.	2.4	64
8	Polyphosphoprotein-Containing Marine Adhesives. <i>Journal of Adhesion</i> , 2009, 85, 447-464.	3.0	62
9	Elucidation of molecular diversity and body distribution of saponins in the sea cucumber <i>Holothuria forskali</i> (Echinodermata) by mass spectrometry. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2009, 152, 124-134.	1.6	59
10	Micro- and nanostructure of the adhesive material secreted by the tube feet of the sea star <i>Asterias rubens</i> . <i>Journal of Structural Biology</i> , 2008, 164, 108-118.	2.8	52
11	Opsin evolution in the Ambulacraria. <i>Marine Genomics</i> , 2015, 24, 177-183.	1.1	50
12	Maintaining the line of defense: regeneration of Cuvierian tubules in the sea cucumber <i>Holothuria forskali</i> (Echinodermata, Holothuroidea). <i>Biological Bulletin</i> , 2000, 198, 34-49.	1.8	48
13	Characterisation of the Carbohydrate Fraction of the Temporary Adhesive Secreted by the Tube Feet of the Sea Star <i>Asterias rubens</i> . <i>Marine Biotechnology</i> , 2011, 13, 484-495.	2.4	48
14	Biomechanics of Adhesion in Sea Cucumber Cuvierian Tubules (Echinodermata, Holothuroidea). <i>Integrative and Comparative Biology</i> , 2002, 42, 1107-1115.	2.0	47
15	Localization of Secondary Metabolites in Marine Invertebrates: Contribution of MALDI MSI for the Study of Saponins in Cuvierian Tubules of <i>H. forskali</i> . <i>PLoS ONE</i> , 2010, 5, e13923.	2.5	46
16	Morphology and tenacity of the tube foot disc of three common European sea urchin species: a comparative study. <i>Biofouling</i> , 2006, 22, 173-186.	2.2	45
17	When a repellent becomes an attractant: harmful saponins are kairomones attracting the symbiotic Harlequin crab. <i>Scientific Reports</i> , 2013, 3, 2639.	3.3	45
18	The Role of Podial Secretions in Adhesion in Two Species of Sea Stars (Echinodermata). <i>Biological Bulletin</i> , 1994, 187, 35-47.	1.8	44

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19	Intra- and interspecific variation of attachment strength in sea urchins. <i>Marine Ecology - Progress Series</i> , 2007, 332, 129-142.	1.9	44
20	The Roles of Spinochromes in Four Shallow Water Tropical Sea Urchins and Their Potential as Bioactive Pharmacological Agents. <i>Marine Drugs</i> , 2017, 15, 179.	4.6	43
21	Characterization of the Adhesive from Cuvierian Tubules of the Sea Cucumber <i>Holothuria forskali</i> (Echinodermata, Holothuroidea). <i>Marine Biotechnology</i> , 2003, 5, 45-57.	2.4	41
22	Molecular diversity and body distribution of saponins in the sea star <i>Asterias rubens</i> by mass spectrometry. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2014, 168, 1-11.	1.6	40
23	Unusual adhesive production system in the barnacle <i>Lepas anatifera</i> : An ultrastructural and histochemical investigation. <i>Journal of Morphology</i> , 2012, 273, 1377-1391.	1.2	39
24	Characterization of the protein fraction of the temporary adhesive secreted by the tube feet of the sea star <i>Asterias rubens</i> . <i>Biofouling</i> , 2012, 28, 289-303.	2.2	38
25	De novo transcriptome analyses provide insights into opsin-based photoreception in the lanternshark <i>Etmopterus spinax</i> . <i>PLoS ONE</i> , 2018, 13, e0209767.	2.5	37
26	Functional morphology of coronal and peristomeal podia in <i>Sphaerechinus granularis</i> (Echinodermata, Echinoidea). <i>Zoomorphology</i> , 1993, 113, 47-60.	0.8	36
27	Comparative histological and immunohistochemical study of sea star tube feet (Echinodermata). <i>Tj ETQq1 1 0.784314 rgBT /Overlock</i>	1.2	34
28	High opsin diversity in a non-visual infaunal brittle star. <i>BMC Genomics</i> , 2014, 15, 1035.	2.8	33
29	A puzzling homology: a brittle star using a putative cnidarian-type luciferase for bioluminescence. <i>Open Biology</i> , 2017, 7, 160300.	3.6	32
30	Adhesive Secretions in Echinoderms: An Overview. , 2006, , 183-206.		31
31	Identification, Characterization, and Expression Levels of Putative Adhesive Proteins From the Tube-Dwelling Polychaete <i>Sabellaria alveolata</i> . <i>Biological Bulletin</i> , 2012, 223, 217-225.	1.8	30
32	Chemical characterization of saponins contained in the body wall and the Cuvierian tubules of the sea cucumber <i>Holothuria (Platyperona) sanctori</i> (Delle Chiaje, 1823). <i>Biochemical Systematics and Ecology</i> , 2016, 68, 119-127.	1.3	30
33	Omics-based molecular analyses of adhesion by aquatic invertebrates. <i>Biological Reviews</i> , 2021, 96, 1051-1075.	10.4	30
34	Estimation of the attachment strength of the shingle sea urchin, <i>Colobocentrotus atratus</i> , and comparison with three sympatric echinoids. <i>Marine Biology</i> , 2008, 154, 37-49.	1.5	28
35	Morphometry and mechanical design of tube foot stems in sea urchins: a comparative study. <i>Journal of Experimental Marine Biology and Ecology</i> , 2005, 315, 211-223.	1.5	27
36	Sugary interfaces mitigate contact damage where stiff meets soft. <i>Nature Communications</i> , 2016, 7, 11923.	12.8	27

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37	Evaluation of the different forces brought into play during tube foot activities in sea stars. <i>Journal of Experimental Biology</i> , 2010, 213, 1162-1174.	1.7	26
38	The Echinoderm Tube Foot and its Role in Temporary Underwater Adhesion. , 2009, , 9-41.		26
39	Functional morphology of the locomotory podia of <i>Holothuria forskali</i> (Echinodermata,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 0.8 25	0.8	25
40	Effects of CO <sub>2</sub> -induced ocean acidification on physiological and mechanical properties of the starfish <i>Asterias rubens</i> . <i>Journal of Experimental Marine Biology and Ecology</i> , 2013, 446, 355-362.	1.5	25
41	Discrimination of Regioisomeric and Stereoisomeric Saponins from <i>Aesculus hippocastanum</i> Seeds by Ion Mobility Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2019, 30, 2228-2237.	2.8	25
42	Ultrastructure of the echinoderm cuticle after fast-freezing / freeze substitution and conventional chemical fixations. , 2000, 48, 385-393.		24
43	The tube feet of sea urchins and sea stars contain functionally different mutable collagenous tissues. <i>Journal of Experimental Biology</i> , 2005, 208, 2277-2288.	1.7	24
44	Inter- and intra-organ spatial distributions of sea star saponins by MALDI imaging. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 8813-8824.	3.7	24
45	Adhesive organ regeneration in <i>Macrostomum lignano</i> . <i>BMC Developmental Biology</i> , 2016, 16, 20.	2.1	24
46	De Novo Adult Transcriptomes of Two European Brittle Stars: Spotlight on Opsin-Based Photoreception. <i>PLoS ONE</i> , 2016, 11, e0152988.	2.5	23
47	Interspecies comparison of sea star adhesive proteins. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2019, 374, 20190195.	4.0	23
48	Molecular insights into the powerful mucus-based adhesion of limpets ( <i>Patella vulgata</i> L.). <i>Open Biology</i> , 2020, 10, 200019.	3.6	23
49	The attachment complex of brachiolaria larvae of the sea star <i>Asterias rubens</i> (Echinodermata): an ultrastructural and immunocytochemical study. <i>Zoomorphology</i> , 2005, 124, 67-78.	0.8	22
50	Cytological changes during luminescence production in lanternshark ( <i>Etmopterus spinax</i> Linnaeus,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 0.8 22	0.8	22
51	De novo transcriptome of the European brittle star <i>Amphiura filiformis</i> pluteus larvae. <i>Marine Genomics</i> , 2015, 23, 109-121.	1.1	22
52	Biological adhesives: from biology to biomimetics. <i>Interface Focus</i> , 2015, 5, 20140086.	3.0	22
53	Measurement of the Adhesion of the Podia in the Asteroid <i>Asterias Rubens</i> (Echinodermata). <i>Journal of the Marine Biological Association of the United Kingdom</i> , 1997, 77, 1251-1254.	0.8	21
54	Heavy metals in <i>Diadema setosum</i> (Echinodermata, Echinoidea) from Singapore coral reefs. <i>Journal of Sea Research</i> , 1997, 38, 35-45.	1.6	21

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55	Etmopterus spinax, the velvet belly lanternshark, does not use bacterial luminescence. Acta Histochemica, 2019, 121, 516-521.	1.8	21
56	Enhancing the Membranolytic Activity of Chenopodium quinoa Saponins by Fast Microwave Hydrolysis. Molecules, 2020, 25, 1731.	3.8	21
57	The cellular basis of bioadhesion of the freshwater polyp Hydra. BMC Zoology, 2016, 1, .	1.0	20
58	Tackling saponin diversity in marine animals by mass spectrometry: data acquisition and integration. Analytical and Bioanalytical Chemistry, 2017, 409, 3115-3126.	3.7	20
59	Epidemiology of a SKin Ulceration Disease (SKUD) in the sea cucumber Holothuria scabra with a review on the SKUDs in Holothuroidea (Echinodermata). Scientific Reports, 2020, 10, 22150.	3.3	20
60	Fine structure of the dorsal papillae in the holothurioid Holothuria forskali (Echinodermata). Tissue and Cell, 1995, 27, 457-465.	2.2	19
61	Adaptations to Benthic Development: Functional Morphology of the Attachment Complex of the Brachiolaria Larva in the Sea Star <i>Asterina gibbosa</i> . Biological Bulletin, 2006, 211, 172-182.	1.8	19
62	Modification of the Adhesive Properties of Silicone-Based Coatings by Block Copolymers. Langmuir, 2014, 30, 358-368.	3.5	18
63	Nitrogen depletion in Arthrospira sp. PCC 8005, an ultrastructural point of view. Journal of Structural Biology, 2016, 196, 385-393.	2.8	17
64	Attachment capacity of the sea urchin Paracentrotus lividus in a range of seawater velocities in relation to test morphology and tube foot mechanical properties. Marine Biology, 2017, 164, 1.	1.5	17
65	Ion mobility mass spectrometry of saponin ions. Rapid Communications in Mass Spectrometry, 2019, 33, 22-33.	1.5	17
66	Triterpenoids in Echinoderms: Fundamental Differences in Diversity and Biosynthetic Pathways. Marine Drugs, 2019, 17, 352.	4.6	17
67	Leaving the Dark Side? Insights Into the Evolution of Luciferases. Frontiers in Marine Science, 2021, 8, .	2.5	17
68	&lt;p&gt;&lt;strong&gt;Echinoderms donâ€™t suck: evidence against the involvement of suction in tube foot attachment*&lt;/strong&gt;&lt;/p&gt;. Zoosymposia, 2012, 7, 25-32.	0.3	17
69	The structural and chemical basis of temporary adhesion in the sea star <i>Asterina gibbosa</i> . Beilstein Journal of Nanotechnology, 2018, 9, 2071-2086.	2.8	16
70	Sea star-inspired recombinant adhesive proteins self-assemble and adsorb on surfaces in aqueous environments to form cytocompatible coatings. Acta Biomaterialia, 2020, 112, 62-74.	8.3	16
71	Effects of Holothurioid Ichthyotoxic Saponins on the Gills of Free-Living Fishes and Symbiotic Pearlfishes. Biological Bulletin, 2015, 228, 253-265.	1.8	15
72	Fine structure of the luminous spines and luciferase detection in the brittle star Amphipura filiformis. Zoologischer Anzeiger, 2017, 269, 1-12.	0.9	15

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73	Biomechanics and behaviour in the sea urchin <i>Paracentrotus lividus</i> (Lamarck, 1816) when facing gradually increasing water flows. <i>Journal of Experimental Marine Biology and Ecology</i> , 2018, 506, 61-71.	1.5	15
74	Ultrastructure of the Penicillate Podia of the Spatangoid Echinoid <i>Echinocardium cordatum</i> (Echinodermata) with Special Emphasis on the Epidermal Sensory Secretory Complexes. <i>Acta Zoologica</i> , 1991, 72, 151-158.	0.8	14
75	Identification and quantification of spinochromes in body compartments of <i>Echinometra mathaei</i> ’s coloured types. <i>Royal Society Open Science</i> , 2018, 5, 171213.	2.4	14
76	Ocean warming and acidification alter the behavioral response to flow of the sea urchin <i>Paracentrotus lividus</i> . <i>Ecology and Evolution</i> , 2019, 9, 12128-12143.	1.9	13
77	Structure and composition of the tunic in the sea pineapple <i>Halocynthia roretzi</i> : A complex cellulosic composite biomaterial. <i>Acta Biomaterialia</i> , 2020, 111, 290-301.	8.3	13
78	Evaluation of the attachment strength of individuals of <i>Asterina gibbosa</i> (Asteroidea, Echinodermata) during the perimetamorphic period. <i>Biofouling</i> , 2005, 21, 229-235.	2.2	12
79	Adhesive Secretions in Echinoderms: A Review. , 2016, , 193-222.		12
80	Unravelling the Sticky Threads of Sea Cucumbers – A Comparative Study on Cuvierian Tubule Morphology and Histochemistry. , 2010, , 87-98.		12
81	Photophore Distribution and Enzymatic Diversity Within the Photogenic Integument of the Cookie-Cutter Shark <i>Isistius brasiliensis</i> (Chondrichthyes: Dalatiidae). <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	11
82	Functional morphology of the tentacles and tentilla of <i>Coeloplana bannworthi</i> (Ctenophora). <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387</i> 117, 165-174.	0.8	10
83	Examples of Bioadhesives for Defence and Predation. <i>Biologically-inspired Systems</i> , 2017, , 141-191.	0.2	10
84	Glow on Sharks: State of the Art on Bioluminescence Research. <i>Oceans</i> , 2021, 2, 822-842.	1.3	10
85	The podia, organs of adhesion and sensory perception in larvae and post-metamorphic stages of the echinoid <i>Paracentrotus lividus</i> (Echinodermata). <i>Biofouling</i> , 1998, 12, 161-171.	2.2	9
86	Instantaneous adhesion of Cuvierian tubules in the sea cucumber <i>Holothuria forskali</i> . <i>Biointerphases</i> , 2014, 9, 029016.	1.6	9
87	Bonding Tactics in Ctenophores – Morphology and Function of the Colloblast System. , 2010, , 29-40.		9
88	Adhesion in echinoderms. , 2020, , 1-60.		9
89	Microwave-Assisted Desulfation of the Hemolytic Saponins Extracted from <i>Holothuria scabra</i> Viscera. <i>Molecules</i> , 2022, 27, 537.	3.8	9
90	Involvement of sulfated biopolymers in adhesive secretions produced by marine invertebrates. <i>Biology Open</i> , 2018, 7, .	1.2	8

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91	Is the adhesive material secreted by sea urchin tube feet species-specific?. <i>Journal of Morphology</i> , 2012, 273, 40-48.	1.2	7
92	Mechanical adaptability of sea cucumber Cuvierian tubules involves a mutable collagenous tissue. <i>Journal of Experimental Biology</i> , 2017, 220, 2108-2119.	1.7	7
93	Molecular mechanisms mediating stiffening in the mechanically adaptable connective tissues of sea cucumbers. <i>Matrix Biology</i> , 2022, 108, 39-54.	3.6	7
94	Mechanisms involved in pearlfish resistance to holothuroid toxins. <i>Marine Biology</i> , 2016, 163, 1.	1.5	6
95	On the Nanomechanical and Viscoelastic Properties of Coatings Made of Recombinant Sea Star Adhesive Proteins. <i>Frontiers in Mechanical Engineering</i> , 2021, 7, .	1.8	6
96	Interspecific Analysis of Sea Urchin Adhesive Composition Emphasizes Variability of Glycans Conjugated With Putative Adhesive Proteins. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	5
97	Crinoid anthraquinones as kairomones allowing host selection for the symbiotic snapping shrimp <i>Synalpheus stimpsonii</i> . <i>Chemoecology</i> , 2022, 32, 95-104.	1.1	4
98	Mapping of Spinochromes in the Body of Three Tropical Shallow Water Sea Urchins. <i>Natural Product Communications</i> , 2018, 13, 1934578X1801301.	0.5	3
99	A sugar-lectin rich interface between soft tissue and the stiff byssus of <i>Atrina pectinata</i> . <i>Biomaterials Science</i> , 2020, 8, 3751-3759.	5.4	3
100	Disentangling the Roles of Functional Domains in the Aggregation and Adsorption of the Multimodular Sea Star Adhesive Protein Sfp1. <i>Marine Biotechnology</i> , 2021, 23, 724-735.	2.4	3
101	Measurement of the attachment strength of brachiolaria larvae and metamorphic individuals of the sea star <i>Asterina gibbosa</i> by a centrifugation method. <i>Journal of Experimental Marine Biology and Ecology</i> , 2009, 372, 82-90.	1.5	2
102	From Sand Tube to Test Tube: The Adhesive Secretion From Sabellariid Tubeworms. , 2015, , 109-128.		2
103	On the Bioadhesive Properties of Silicone-Based Coatings by Incorporation of Block Copolymers. <i>Biologically-inspired Systems</i> , 2017, , 303-343.	0.2	0