

**Bibliometrics (updated 01/09 – 2022)**

*Web of Science*: H-index = 26, citations = 1651. *Google Scholar*: H-index = 29, citations = 2585

Publications: Total = 73, peer reviewed = 68, per reviewed first author = 30, corresponding author = 45

**Peer reviewed publications**

2022

66. Flensburg, S, **Garm, A** and Funch, P. (2022). The contraction-expansion behaviour in the demosponge *Tethya wilhelma* is diurnal and light-controlled. *BioRxiv*.

doi: <https://doi.org/10.1101/2022.07.06.499042>

65. **Garm, A**, Svaerke, J-E, Pontieri, D and Oakley, T. (2022). Expression of Opsins of the Box Jellyfish *Tripedalia cystophora* reveals the first photopigment in cnidarian ocelli and supports the presence of photoisomerases. *Frontiers in Neuroanatomy*, doi: 10.3389/fnana.2022.916510

64. **Garm, A**, Sundberg, D and Korsvig-Nielsen, C (2022). Dispersed vision in starfish: a collection of semi-independent arms. *In: Dispersed Vision* (eds: Bok, M and Bushbek, E). Springer New York

2021

63. Posth, NR, and **Garm, A** (2021). Introduction to the Series on Current Knowledge in Marine Microplastics—Pollution Down to the Nanoscale. *The Biological Bulletin* 240 (1), 41.

doi.org/10.1086/713624

62. **Garm, A**, Gonzalez, PM, Simonsen, SH, Worsaae, K. (2021). Have the eyes of bioluminescent scale worms adapted to see their own light? A comparative study of eyes and vision in *Harmothoe imbricata* and *Lepidonotus squamatus*. *Journal of Experimental Biology* 224 (14): jeb242501.

61. Nielsen, SKD, Koch, TL, Wiisbye, SH, Grimmelikhuijzen, CJP, and **Garm, A** (2021). Neuropeptide Expression in the Box Jellyfish *Tripedalia cystophora* – New insights into the Complexity of a Simple Nervous System. *Journal of Comparative Neurology*. DOI: 10.1002/cne.25133

2020

60. N Picciani, Musser, JM, Oel, AP, **Garm, A**, Arendt D, and Oakley TH (2020). Organ Complexity and Cell History: a Case of Eye Evolution in Cnidaria *Integrative and comparative biology* 60, E394-E394

2019

59. Bok, M, Nilsson, D-E, and **Garm, A** (2019). Photoresponses in the radiolar eyes of the fan worm, *Acromegalomma vesiculosum* (Montagu). *Journal of Experimental Biology* 222(23): 1-9

58. Korsvig-Nielsen, C, Hall, M, Motti, C, and **Garm, A** (2019). Eyes and negative phototaxis in juvenile crown-of-thorns starfish, *Acanthaster* species complex. *Biology Open* 8: doi:10.1242/bio.041814

57. Jensen, KW, Rodrigues, L, Pape, T, **Garm, A**, Santamariad, S and Reboleira, ASP (2019). Hyperparasitism in caves bats, bat flies and ectoparasitic fungus interaction. *Journal of Invertebrate Pathology* 166: 1-10

56. Helmark, S. and **Garm, A.** (2019). Gonadal cnidocytes in the cubozoan *Tripedalia cystophora* Conant, 1897 (Cnidaria Cubozoa). *Journal of Morphology*: 1-7. DOI: 10.1002/jmor.21046

55. Nielsen, SKD, Koch, TL, Hauser, F, **Garm, A** and Grimmelikhuijzen, CJP (2019). *De novo* transcriptome assembly of the cubomedusa *Tripedalia cystophora*, including the analysis of a set of genes involved in peptidergic neurotransmission. *BMC genomics* 20:175, doi.org/10.1186/s12864019-5514-7

54. Jensen, LH. Motti, CA, Tonin, H, **Garm, A**, Kroon, FJ (2019). Sources, distribution and uptake of microfibrils on the Great Barrier Reef, Australia. *Scientific Reports* 9: 9021, DOI: 10.1038/s41598019-45340-7

#### 2018

53. Lowe, EK, **Garm, A**, Ullrich-Lüther, E, Cuomo, C and Arnone, IM (2018). The crowns have eyes: Multiple opsins found in the eyes of the Crown-of-Thorns Starfish *Acanthaster planci*. *BMC Evolutionary Biology* 18:168

52. Beer, S, **Garm, A**, Huwer, B, Dierking, J, and Nielsen, T.G (2018). No increase in marine microplastic concentration over the last three decades - A case study from the Baltic Sea. *Science of the Total Environment*. 621: 1272-1279, [doi.org/10.1016/j.scitotenv.2017.10.101](https://doi.org/10.1016/j.scitotenv.2017.10.101)

51. Stamatis, S-A., Worsaae, K. and **Garm, A.** (2018). Regeneration of the rhopalium and the rhopalial nervous system in the box jellyfish *Tripedalia cystophora*. *Biological Bulletin* 234 (1): 2236

50. Bielecki, J and **Garm, A.** (2018). Vision made easy: cubozoans can advance our understanding of systems level visual information processing. *Results and Problems in Cell Differentiation* 65: 599-624

49. Birk, MH, Blicher, ME and **Garm, A.** (2018). Deep-sea starfish from the arctic have well developed eyes in the dark. Accepted for publication in *Proceedings of the Royal Society of London, Series B*. 285: 20172743 doi.org/10.1098/rspb.2017.2743

#### 2017

48. **Garm, A.** (2017). Sensory biology of starfish – with emphasis on recent discoveries in their visual ecology. *Integrative and Comparative Biology*. [doi: 10.1093/icb/ix086](https://doi.org/10.1093/icb/ix086)

47. **Garm, A**, Berthold, GH, and Anton, S (2016). Coding properties in invertebrate sensory systems. *Frontiers in Invertebrate Physiology*. doi: 10.3389/fphys.2016.00688

#### 2016

46. Petie, R, **Garm, A** and Hall, M (2016). Crown-of-thorns starfish have true image forming vision. *Frontiers in Zoology*, 13:41, DOI 10.1186/s12983-016-0174-9

45. Beer, S, Wentzel, C, Petie, R and **Garm, A** (2016). Active control of the visual field in the starfish *Acanthaster planci*. *Vision Research*, 127: 28–34

44. Petie, R, Hall, M, Hyldahl, M and **Garm, A** (2016). Visual orientation by the crown-of-thorns starfish (*Acanthaster planci*). *Coral Reefs*, DOI 10.1007/s00338-016-1478-0

43. **Garm, A**, Nilsson, D-E, Bielecki, J, and Petie,R (2016). Hunting by a bioluminescent torch, vision in the nocturnal box jellyfish *Copula sivickisi*. *Frontiers in Physiology* 7:99. doi: 10.3389/fphys.2016.00099

#### 2015

42. **Garm, A**, Lebouvier,M and Tolunay,D (2015). Mating in the box jellyfish *Copula sivickisi* – novel function of cnidocytes. *Journal of Morphology* 276: 1055-1064

#### 2014

41. Speiser, ID., Pankey, MS., Zaharoff, AK, Battelle, BA., Heather D. Bracken-Grissom, HD., Breinholt, JW., Bybee S., Cronin, TW., **Garm, A.**, Patel, NH., Porter, ML., Protas, ME, Rivera, AS., Serb, JM., Zigler, KS., Crandall, KA., and Oakley, TH (2014). Using Phylogenetically-Informed Annotation (PIA) to search for light-interacting genes in transcriptomes from non-model organisms *BMC Bioinformatics* 15(1):350-361

40. Gurska, D. and **Garm, A** (2014). Growth and cell turn over in the box jellyfish *Tripedalia cystophora*. *PLoS ONE* 9(7). DOI: 10.1371/1-11

39. Bielecki, J, Zaharoff, A, Leung, N, **Garm, A** and Oakley, TH (2014). The cubozoan visual system utilizes several opsins. *PlosONE* 9(6):e98870: 1-9

38. Straehler-Pohl, I, **Garm, A** and Morandin, A (2014). The dimorphism in Tripedaliidae (Conant 1897) (Cnidaria, Cubozoa, Carybdeida) – a revision with focus on the structures involved in sexual reproduction *Zootaxa* 3785 (4): 533–549

37. **Garm, A** and Nilsson, D-E (2014). Visual navigation in starfish: First evidence for use of vision and eyes in star fish. *Proceedings of the Royal Society B* 281: 1-8

#### 2013

36. Bielecki, J, Nachman, G and **Garm, A** (2013). Swim pacemaker response to bath applied neurotransmitters in the cubozoan *Tripedalia cystophora* *Journal of Comparative physiology A*. 199: 785-795

35. **Garm, A**, Heddal, I, Islin, M and Gurska, D. (2013). Pattern and contrast dependant visual response in the box jellyfish *Tripedalia cystophora*. *Journal of Experimental Biology* 216: 4520-4529

34. Bielecki,J, Høeg, JT and **Garm, A** (2013). Fixational eye movements in the earliest stage of metazoan evolution. *PlosONE* 8(6): e66442 DOI: 10.1371/journal.pone.0066442

33. Petie, R, **Garm, A** and Nilsson D-E (2013). Velarium control and visual steering in box jellyfish. *The Journal of Comparative Physiology* 199: 315-324.

32. Petie, R, **Garm, A** and Nilsson D-E (2013). Contrast and rate of light intensity decrease control directional swimming in the box jellyfish *Tripedalia cystophora* (Cnidaria: Cubomedusae) *Hydrobiologica* 703: 69-77

2012

31. Moldrup, M. and **Garm, A.** (2012). Spectral sensitivity of phototaxis in the dinoflagellate *Kryptoperidinium foliaceum* and their reaction to physical encounters. *Journal of Experimental Biology* 215: 2342-2346

30. **Garm, A.**, J. Bielecki, R. Petie, and D.E. Nilsson. (2012). Oposite diurnal rhythms in the box jellyfish *Tripedalia cystophora* and *Carybdea sivickisi*. *Biological Bulletin* 222: 35-45 2011

29. **Garm, A.**, Oskarsson, M. and Nilsson, D-E (2011). Box jellyfish use terrestrial visual cues for navigation. *Current Biology* 21: 798-803

28. Petie, R, **Garm, A** and Nilsson D-E (2011). Visual control of steering in the box jellyfish *Tripedalia cystophora*. *Journal Of Experimental Biology* 214: 2809-2815 (Included cover picture) 2010

27. O'Connor, M., **Garm, A.**, Marshall, N. J., Hart, N., Ekström, P., Skogh, C., Nilsson, D.-E (2010). Visual pigment in the lens eyes of the box jellyfish *Chiropsella bronzie*, *Proceedings of the Royal Society of London*, series B 277: 1843-1848

26. O'Connor, M, Nilsson, D-E, and **Garm, A** (2010). Temporal properties of the lens eyes of the box jellyfish *Tripedalia cystophora*. *Journal of Comparative Physiology A*. 196: 213-220 2009

25. O'Connor, M, **Garm, A** and Nilsson, D-E (2009). Structure and optics of the eyes of the box jellyfish *Chiropsella bronzie*. *Journal of Comparative Physiology A* 195:557-569

24. **Garm, A.** and Mori, S (2009). Multiple photoreceptor systems control the swim pacemaker activity in box jellyfish. *The Journal of Experimental Biology* 212:3951-3960. (Included cover picture) 2008

23. **Garm, A.**, Anderson, F, and Nilsson, D-E (2008). Unique structure and optics of the lesser eyes of the box jellyfish *Tripedalia cystophora*. *Vision Research* 48(8): 1061-1073 (Included cover picture)

22. Nørregård, T, Nilsson, D-E, Henschel, RJ, **Garm, A** and Wehner, R (2008). Vision in the nocturnal wandering spider *Leucorchestris arenicola* (Araneae: Sparassidae). *Journal of Experimental Biology* 211: 816-823

21. Chan, BKK, **Garm, A.**, Høeg, JT (2008). Setal morphology of barnacle cirri: adaptations and implications for thoracican phylogeny. *Journal of Zoology* 275: 294-308

20. Ekström, P, **Garm, A.**, Paulsson, J, Vihtelic, T, and Nilsson, D-E (2008). Immunohistochemical evidence for several photosystems in box jellyfish using opsin-antibodies. *Cell and Tissue Research* 333: 115-124 (Included cover picture)

19. **Garm, A.**, Bielecki, J (2008). Swim pacemakers in box jellyfish are modulated by the visual input. *Journal of Comparative Physiology A* 194:641-651.

2007

18. **Garm, A.**, Poussart, Y, Parkefelt, L, Ekström, P, and Nilsson, D-E (2007). The ring nerve of the box jellyfish *Tripedalia cystophora*. *Cell and Tissue Research* 329 (1): 147 – 157 (Included cover picture)

17. **Garm, A.**, Coates, M, Gad, R, Seymour, J, and Nilsson, D-E (2007). The lens eyes of the box jellyfish *Tripedalia cystophora* and *Chiropsalmus* sp. are slow and color-blind. *Journal of Comparative Physiology A*. 193(5): 547-557 (Included cover picture)

16. **Garm, A**, O'Connor, M, Parkefelt, L, and Nilsson, D-E. (2007). Visually guided Obstacle avoidance in the box jellyfish *Tripedalia cystophora* and *Chiropsella bronzie*. *Journal of Experimental Biology* 210: 3616-362

2006

15. **Garm, A**, Høeg JT (2006). Ultrastructure and functional organization of mouthpart sensory setae of the spiny lobster *Panulirus argus*. *Journal of Morphology*.267: 464-476

14. **Garm, A**, Boudes, M, Ekström, P, and Nilsson, D-E (2006). The rhopalia are integrated parts of the central nervous system in box jellyfish. *Cell and Tissue Research* 325: 333-343

13. Skogh, C, **Garm, A**, Nilsson, D-E, and Ekström, P (2006). The bilaterally symmetric rhopalial nervous system of box jellyfish. *Journal of Morphology* 267 : 1391-1405 (Included cover picture)

12. Coates, M, **Garm, A**, Theobald, JC, Thompson, SH and Nilsson, D-E (2006). The spectral sensitivity of the lens eyes of the box jellyfish *Tripedalia Cystophora*. *Journal of Experimental Biology* 209: 3758-3765

2005

11. **Garm, A**, Shabani, S., Derby CD, Høeg JT (2005). Chemosensory properties of mouthpart setae from the Caribbean spiny lobster, *Panulirus argus* (Crustacea: Decapoda). *Journal of Experimental Marine Biology and Ecology*. 314(2): 196-207.

10. Pasternak Z., **Garm, A**, Høeg JT (2005). The morphology of the chemosensory aesthetasc-like setae used during settlement of cypris larvae in the parasitic barnacle *Sacculina carcini* (Cirripedia: Rhizocephala). *Marine Biology*. 146(5): 1005-1013

9. Nilsson, D, Gislén, L, Coates, M, Skogh, C and **Garm, A** (2005). Advanced optics in a jellyfish eye. *Nature*. 435: 201-205 (Included cover picture and News and Views paper)

8. **Garm, A** (2005). Mechanosensory properties of the mouthpart setae of the European shore crab *Carcinus maenas*. *Marine Biology* 147: 1179-1190

2004

7. **Garm, A** (2004). Mechanical functions of setae from the mouth apparatus of seven species of decapod crustaceans. *The Journal of Morphology* 260: 85-100

6. **Garm, A** (2004). Revising the definition of the crustacean seta and setal classification systems based on examinations of the mouthpart setae of seven species of decapods. *The Zoological Journal of the Linnean Society* 142: 233-252.

5. **Garm, A**, Derby CD, Høeg JT (2004). Mechanosensory neurons in mouthpart setae from the spiny lobster *Panulirus argus* with bend- and osmo-sensitivity. *Biological Bulletin* 207: 195-208. (Included cover picture)

2003

4. Lagerström NC, **Garm, A**, Høeg JT (2003). Notes on the ultrastructure of the setae on the fourth antennular segment of the *Balanus amphitrite* cypris (Crustacea: Cirripedia: Thoracica). *Journal of the Marine Biological Association, UK* 83(2): 361-365

3. **Garm, A**, Hallberg E, Høeg JT (2003). The role of maxilla 2 and its setae during feeding in the shrimp *Palaemon adspersus* (Crustacea: Decapoda). *Biological Bulletin* 204: 126-137

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2. **Garm, A**, Høeg JT (2001). Function and functional groupings of the complex mouth apparatus of the squat lobsters *Munida sarsi* Huus and *M. tenuimana* G.O. Sars (Crustacea: Decapoda). *Biological Bulletin* 200: 281-297

2000

1. **Garm, A**, Høeg JT (2000). Functional mouthpart morphology of the squat lobster *Munida sarsi*, with comparison to other anomurans. *Marine Biology* 137: 123-138

**Invited peer reviewed reviews/book chapters**

**Garm, A** and Watling, L (2013). The crustacean integument: setae, scales, and other ornamentation. In: *The Natural History of Crustaceans Vol. 1: Functional Morphology & Diversity* (eds. Theil, M and Watling, L). Pp: 167-198. Oxford University Press.

**Garm, A** and Ekström, P (2010). Evidence for multiple photosystems in jellyfish. *International Review of Cell and Molecular Biology* 280: 41-78 (Invited review, included cover picture)

**Popular accounts**

**Garm, A** (2013). Palaemon rejer i de danske farvande. *FlueFisker*. 17(3): 8-9

**Garm, A** and Petie, R (2010). Visual ecology of box jellyfish. *Journal of the Akajima Marine Science Laboratory*. 21: 12-15. In Japanese.

**Garm, A** and D-E Nilsson (2006). Syn og synsstyret adfærd hos havhvepsene, de tropiske vandmænd. *Naturens Verden*. 89(2): 2-10.

**Garm, A** (2005). Cubomeduser – vandmænd med 24 øjne. *Online publication on the webpage of The Danish National Research Council*: <http://snf.formidling.dk/>

**Garm, A** (1998). Video afslører troldhummerens spisevaner. I: *Dansk Naturhistorisk Forenings Årsskrift 9 – 1997/1998*