

Complete List of Publications

1. D.L. DeAngelis, K.A. Rose, L.B. Crowder, E.A. Marschall, and **D. Lika**. 1993. Fish Cohort Dynamics: Application of Complementary Modeling Approaches. *The American Naturalist*, 142 (4): 604-622
2. T.G. Hallam, G.A. Canziani, and **K. Lika**. 1996. On the Relationships Between Bioassays and Dynamics in Chemically Stressed, Aquatic Population Models. *Ecologia Austral*, 6: 45-54
3. T.G. Hallam, E.T. Funasaki, **K. Lika**, and H.L. Lee. 1997. Utilities and Indicators of Stress Dynamics in Physiologically Structured Population Models. *Environmental Modeling and Assessment*, 2: 1-6
4. T.G. Hallam and **K. Lika**. 1997. Modeling the Effects of Toxicants on a Fish Population in a Spatially Heterogeneous Environment: I. Behavior of the Unstressed, Spatial Model. *Nonlinear Analysis, Theory, Methods & Applications*, 30(3): 1699-1707
5. **K. Lika** and T.G. Hallam. 1997. Modeling the Effects of Toxicants on a Fish Population in a Spatially Heterogeneous Environment: II. Lethal Effects. *Nonlinear Analysis, Theory, Methods & Applications*, 30(3): 1709-1719
6. **K. Lika** and T.G. Hallam. 1999. Traveling Wave Solutions of a Nonlinear Reaction-Advection Equation. *Journal of Mathematical Biology*, 38: 346-358
7. **K. Lika** and R.M. Nisbet. 2000. A Dynamic Energy Budget Model based on Partitioning of Net Production. *Journal of Mathematical Biology*, 41:361-386
8. R.M. Nisbet, E.B. Muller, **K. Lika** and S.A.L.M. Kooijman. 2000. From molecules to ecosystem through dynamic energy budget models. *Journal of Animal Ecology*, 69: 913-926
9. K.A. Triantis, M. Mylonas, **K. Lika** and K. Vardinogiannis. 2003. A model for species area-habitat relationship. *Journal of Biogeography*, 30: 19-27
10. **K. Lika** and S.A.L.M. Kooijman. 2003. Life history implications of allocation to growth versus reproduction in Dynamic Energy Budgets. *Bulletin of Mathematical Biology*, 65: 809-834
11. **K. Lika** and N. Papandroulakis. 2005. Modeling feeding processes: a test of a new model for sea bream (*Sparus aurata* L.) larvae. *Canadian Journal of Fisheries and Aquatic Sciences*, 62: 425-435
12. I.A. Papadakis, K. Kotzabasis and **K. Lika**. 2005. A cell-based model for the photo- and CO₂ – acclimation of the photosynthetic apparatus. *Biochimica et Biophysica Acta-Bioenergetics*, 1708: 250-261
13. K.A. Triantis, M. Mylonas, **K. Lika** and K. Vardinogiannis. 2005. Species richness, habitat diversity and area: A case study based on land snails in Skyros archipelago (Aegean Sea, Greece). *Journal of Biogeography*, 32: 1727-1735
14. K.A. Triantis, K. Vardinogiannis, E. Tsolaki, I. Botsaris, **K. Lika** and M. Mylonas. 2006. Re-approaching small island effect., *Journal of Biogeography*. 33 (5): 914–923
15. **K. Lika** and I. A. Papadakis. 2009. Modeling the biodegradation of phenolic compounds by microalgae. *Journal of Sea Research* 62: 135–146
16. V. Freitas, J.F.M.F. Cardoso, **K. Lika**, M. A. Peck, J. Campos, S.A.L.M. Kooijman, H.W. van der Veer. 2010. Temperature tolerance and energetics: a Dynamic Energy Budget-based comparison of North Atlantic marine species. *Philosophical Transactions of the Royal Society B* . 365: 3553–3565
17. A. Palialexis, S. Georgakarakos, I. Karakassis, **K. Lika**, V. D. Valavanis. 2011. Prediction of marine species distribution from presence-absence acoustic data: comparing the fitting efficiency and the predictive capacity of conventional and novel distribution models. *Hydrobiologia*. 670:241–266
18. A. Palialexis, S. Georgakarakos, I. Karakassis, **K. Lika**, V. D. Valavanis. 2011. Fish distribution predictions from different points of view: comparing associative neural networks, geostatistics and regression models. *Hydrobiologia*, 670:165–188

19. **K. Lika**, M. R. Kearney, V. Freitas, H. W. v. d. Veer, J. v. d. Meer, J. W. M. Wijsman, L. Pecquerie and S. A. L. M. Kooijman. 2011. The 'covariation method' for estimating the parameters of the standard Dynamic Energy Budget model I: philosophy and approach. *Journal of Sea Research*. 66:270–277
20. **K. Lika**, M. R. Kearney and S. A. L. M. Kooijman. 2011. The 'covariation method' for estimating the parameters of the standard Dynamic Energy Budget model II: properties and preliminary patterns. *Journal of Sea Research*, 66:278–288
21. V. Freitas, **K. Lika**, J. IJ. Witte, H.W. van der Veer. 2011. Food conditions of the sand goby *Pomatoschistus minutus* in shallow waters: an analysis in the context of Dynamic Energy Budget theory. *Journal of Sea Research*. 66:440–446
22. **K. Lika** and S.A.L.M. Kooijman. 2011. The comparative topology of energy allocation in budget models. *Journal of Sea Research*, 66:281–291
23. I.A. Papadakis, K. Kotzabasis and **K. Lika**. 2012. Modeling the dynamic modulation of light energy in photosynthetic algae. *Journal of Theoretical Biology*, 300:254–26
24. N. Papandroulakis, **K. Lika**, T.S. Kristiansen, F. Oppedal, P. Divanach and M. Pavlidis. 2012. Behaviour of European sea bass, *Dicentrarchus labrax* L., in cages - impact of early life rearing conditions and management. *Aquaculture Research*, 45: 1545-1558
25. S.A.L.M. Kooijman and **K. Lika**. 2014. Resource allocation to reproduction in animals. *Biological Reviews*, 89: 849-859
26. **K. Lika**, S.A.L.M. Kooijman and N. Papandroulakis. 2014. Metabolic acceleration in mediterranean perciformes. *Journal of Sea Research*, 94:37-46.
27. **K. Lika**, S. Augustine, L. Pecquerie and S.A.L.M. Kooijman. 2014. The bijection from data to parameter space with the standard deb model quantifies the supply-demand spectrum. *Journal of Theoretical Biology*. 354:35-47
28. S. A. L. M. Kooijman and **K. Lika**. 2014. Comparative energetics of the 5 fish classes on the basis of dynamic energy budgets. *Journal of Sea Research*, 94: 19-28
29. A. Rinaldi, V. Montalto, **K. Lika**, K. Sanfilippo, M. Manganaro and G. Sarà. 2014. Estimation of dynamic energy budget parameters for the mediterranean tootcarp (*Aphanius fasciatus*). *Journal of Sea Research*, 94: 65-70
30. **K. Lika**, M. Pavlidis, N. Mitrizakis, A. Samaras and N. Papandroulakis. 2015. Do experimental units of different scale affect the biological performance of European sea bass larvae (*Dicentrarchus labrax*)? *Journal of Fish Biology*, 86:1271-1285
31. A. Samaras, M. Pavlidis, **K. Lika**, A. Theodoridi and N. Papandroulakis. 2015. Scale matters: performance of European sea bass, *Dicentrarchus labrax*, L. (1758), reared in cages of different volumes. *Aquaculture Research*, 1-16, doi:10.1111/are.12942
32. S. Augustine, **K. Lika**, and S.A.L.M. Kooijman. 2017. Comment on the ecophysiology of the Greenland shark, *Somniosus microcephalus*. *Polar Biology*, DOI 10.1007/s00300-017-2154-8
33. L. Pecquerie and **K. Lika**. 2017. Is reproduction limiting growth? Comment on "Physics of metabolic organization" by Marko Jusup et al. *Phys Life Rev.*, 20:75-77. doi: 10.1016/j.plrev.2017.01.026
34. C.M. Marques, S. Augustine, **K. Lika**, L. Pecquerie and S.A.L.M. Kooijman. 2018. The AmP project: Comparing Species on the Basis of Dynamic Energy Budget Parameters. *PloS Computational Biology*, doi.org/10.1371/journal.pcbi.1006100 PLoS Comput Biol 14(5): e1006100. https://doi.org/10.1371/journal.pcbi.1006100
35. C.A. Murphy, R.M. Nisbet, P. Antczak, N. Garcia-Reyero, A. Gergs, **K. Lika**, T. Mathews, E.B. Muller, D. Nacci, A. Peace, C.H. Remien, I.R. Schultz, L.M. Stevenson, K.H. Watanabe. 2018. Incorporating sub-organismal processes into dynamic energy budget models for ecological risk assessment. *Integrated Environmental Assessment and Management (IEAM)*, doi.org/10.1002/ieam.4063

36. A. Samaras, N. Papandroulakis, **K. Lika**, M. Pavlidis. 2018. Water temperature modifies the acute stress response of European sea bass, *Dicentrarchus labrax* L. (1758). *Journal of Thermal Biology*, 78 (2018) 84–91
37. S. Augustine, **K. Lika**, and S.A.L.M. Kooijman. 2019. Why big-bodied animal species cannot evolve a waste-to-hurry strategy. *Journal of Sea Research*, 143, 18-26. <https://doi.org/10.1016/j.seares.2018.06.002>
38. **K. Lika**, S. Augustine, and S.A.L.M. Kooijman. 2019. Body size as emergent property of metabolism. *Journal of Sea Research*, 143, 8-17. doi.org/10.1016/j.seares.2018.04.005
39. S. Augustine, **K. Lika**, and S.A.L.M. Kooijman. 2019. Altricial-precocial spectra in animal kingdom. *Journal of Sea Research*, 143, 27-34. doi.org/10.1016/j.seares.2018.03.006
40. O. Stavrakidis-Zachou, N. Papandroulakis, **K. Lika**. 2019. A DEB model for European sea bass (*Dicentrarchus labrax*): parameterisation and application in aquaculture. *Journal of Sea Research*, 143, 262-271. doi.org/10.1016/j.seares.2018.05.008
41. C.M. Marques, **K. Lika**, S. Augustine, L. Pecquerie, S.A.L.M. Kooijman. 2019. Fitting multiple models to multiple data sets. *Journal of Sea Research*, 143, 48-56. <https://doi.org/10.1016/j.seares.2018.07.004>
42. E. Livanou, A. Lagaria, S. Psarra, K. Lika. 2019. A DEB-based approach of modeling dissolved organic matter release by phytoplankton. *Journal of Sea Research*, 143, 140-151,. doi.org/10.1016/j.seares.2018.07.016
43. O. Stavrakidis-Zachou, N. Papandroulakis, A. Sturm, P. Anastasiadis, F. Wätzold, **K. Lika**. 2019. Towards a computer-based Decision Support System for aquaculture stakeholders in Greece in the context of climate change. *International Journal of Sustainable Agricultural Management and Informatics*, 3/4, 219-234. [10.1504/IJSAMI.2018.099235](https://doi.org/10.1504/IJSAMI.2018.099235).
44. E. Muller, **K. Lika**, R. Nisbet, I. Schultz, J. Casas, A. Gergs, C. Murphy, D. Nacci, K. Watanabe. 2019. *Regulation of Reproductive Processes with Dynamic Energy Budgets Functional Ecology*, 33:819-832, [doi: 10.1111/1365-2435.13298](https://doi.org/10.1111/1365-2435.13298)
45. E. Livanou , A. Lagaria, I. Santi, M. Mandalakis, A. Pavlidou, **K. Lika**, S. Psarra. 2019. Pigmented and heterotrophic nanoflagellates: Abundance and grazing on prokaryotic picoplankton in the ultra-oligotrophic Eastern Mediterranean Sea. *Deep-Sea Research Part II*, 164, 100-111. <https://doi.org/10.1016/j.dsr2.2019.04.007>
46. S.A.L.M. Kooijman, **K. Lika**, S. Augustine, N. Marn, B.W. Kooi. 2020. The Energetic basis of population growth in animal Kingdom. *Ecological Modelling*, <https://doi.org/10.1016/j.ecolmodel.2020.109055>
47. E. Livanou, K. Barsakis, S. Psarra, K. Lika. 2020. Modelling the nutritional strategies in mixotrophic nanoflagellates. *Ecological Modelling*, <https://doi.org/10.1016/j.ecolmodel.2020.109053>
48. **K. Lika**, S. Augustine, S.A.L.M. Kooijman. 2020. The use of augmented loss functions for estimating Dynamic Energy Budget parameters. *Ecological Modelling*, <https://doi.org/10.1016/j.ecolmodel.2020.109110>
49. S. Augustine, **K. Lika**, S.A.L.M. Kooijman. 2020. Comparing lossfunctions and interval estimates for survival data. *Ecological Modelling*, [10.1016/j.ecolmodel.2020.109077](https://doi.org/10.1016/j.ecolmodel.2020.109077)
50. O. Stavrakidis-Zachou, **K. Lika**, P. Anastasiadis, N. Papandroulakis. 2021. Projecting climate change impacts on Mediterranean finfish production: A case study in Greece. *Climatic Change* (2021) 165:67 doi.org/10.1007/s10584-021-03096-y
51. O. Stavrakidis-Zachou, A. Sturm, **K. Lika**, Frank Wätzold N. Papandroulakis. 2021. ClimeGreAq: A software-based DSS for the climate change adaptation of Greek aquaculture. *Environmental Modelling and Software*. *Under review*
52. E. Livanou, A. Oikonomou, S. Psarra, K. Lika. 2021. The role of mixotrophic nanoflagellates in the Eastern Mediterranean microbial food web. *Marine*

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53. O. Stavrakidis-Zachou, **K. Lika**, A. Tsalafouta, P. Michail, A.H. Mohamed, N. Papandroulakis 2021. Thermal tolerance, metabolic scope and performance of meagre, *Argyrosomus regius*, reared under high water temperatures, *Journal of Thermal Biology*, *Under review*

Book chapter

1. J. Val, F. Villa, K. Lika, and C. Boe. 1997. Nonlinear Models of Structured Populations: Dynamic Consequences of Stage Structure and Discrete Sampling Compared. In *Structured Population Models in Marine, Freshwater, and Terrestrial Systems* by S. Tuljapurkar and H. Caswell (eds). Chapman & Hall, pp. 587-613.
2. C.A. Murphy, R.M. Nisbet, P. Antczak, N. Garcia-Reyero, A. Gergs, K. Lika, T. Mathews, E.B. Muller, D. Nacci, A. Peace, C.H. Remien, I.R. Schultz, K.H. Watanabe. 2017. Linking Adverse Outcome Pathways to Dynamic Energy Budgets: A conceptual model, In N. Garcia-Reyero and C.A. Murphy (eds) *A Systems Biology Approach to Advancing Adverse Outcome Pathways for Risk Assessment*. Springer, 401 pp.