

Published papers

1. Moraitou-Apostolopoulou M, Verriopoulos G, **Karakassis I** (1986) Effects of pre-exposure on the tolerance of *Artemia salina* to oil and oil dispersant. *Marine Pollution Bulletin*, **17**(2): 72-76
2. Raffaelli D, **Karakassis I**, Galloway A (1991) Zonation schemes on sandy shores: a multivariate approach. *Journal of Experimental Marine Biology & Ecology*, **148**: 241-253
3. Koutsoubas D, Koukouras A, **Karakassis I**, Dounas C (1992) Contribution to the knowledge of Gastropoda and Bivalvia (Mollusca) of Crete Island (S. Aegean Sea). *Bolletino Malacologico*, **28**(1-4): 69-82.
4. **Karakassis I** (1995) S_{∞} : A new method for calculating macrobenthic species richness. *Marine Ecology Progress Series*, **120**: 299-303
5. **Karakassis I**, Smith CJ, Eleftheriou A (1996) Performance of neutral model analysis in a spatio-temporal series of macrobenthic replicates. *Marine Ecology Progress Series*, **137**: 173-179
6. **Karakassis I**, Eleftheriou A (1997) The continental shelf of Crete: structure of macrobenthic communities. *Marine Ecology Progress Series*, **160**: 185-196
7. **Karakassis I**, Tsapakis M, Hatziyanni E (1998) Seasonal variability in sediment profiles beneath fish farm cages in the Mediterranean. *Marine Ecology Progress Series*, **162**: 243-252
8. Papadopoulou KN, **Karakassis I**, Otegui A (1998) Harbour meiofaunal communities and organic enrichment effects. *Fresenius Environmental Bulletin*, **7**(1-2): 34-41
9. **Karakassis I**, Eleftheriou A (1998) The continental shelf of Crete: the benthic environment. *PSZNI: Marine Ecology* **19**(4): 263-277
10. **Karakassis I** (1998) Aquaculture and coastal marine biodiversity. *Oceanis* **24**: 271-286.
11. Pitta P, **Karakassis I**, Tsapakis M, Zivanovic S (1999) Natural vs. mariculture induced variability in nutrients and plankton in the Eastern Mediterranean. *Hydrobiologia* **391**: 181-194
12. **Karakassis I**, Hatziyanni E, Tsapakis M, Plaiti W (1999) Benthic recovery following cessation of fish farming: a series of successes and catastrophes. *Marine Ecology Progress Series* **184**: 205-218
13. Rumohr H, **Karakassis I** (1999) Comparison of multivariate patterns: different taxonomic levels in macrofaunal analysis vs. sediment profiling imagery (SPI). *Marine Ecology Progress Series*, **190**: 125-132
14. Lampadariou N, **Karakassis I**, Chapdelaine L, Wilkinson MF, Dafnomili E (2000) Spatial variability in water column and sediment chemistry in Heraklion harbour (Crete, E. Mediterranean). *Fresenius Environmental Bulletin*, **9**: 164-171
15. **Karakassis I**, Tsapakis M, Hatziyanni E, Papadopoulou K-N, Plaiti W (2000) Impact of cage farming of fish on the seabed in three Mediterranean coastal areas. *ICES Journal of Marine Science*, **57**: 1462-1471
16. **Karakassis I**, Hatziyanni E (2000) Benthic disturbance due to fish farming analyzed under different levels of taxonomic resolution. *Marine Ecology Progress Series*, **203**: 247-253
17. Rumohr H, **Karakassis I**, Jensen JN (2001) Estimating species richness, abundance and diversity with 70 macrobenthic replicates in the Western Baltic. *Marine Ecology Progress Series* **214**: 103-110
18. **Karakassis I**, Tsapakis M, Hatziyanni E, Pitta P (2001) Diel variation of nutrients and chlorophyll in sea bream and sea bass cages in the Mediterranean. *Fresenius Environmental Bulletin* **10**: 278-283
19. Henderson A, Gamito S, **Karakassis I**, Pederson P, Smaal A (2001) Use of Hydrodynamic and Benthic Models for Managing Environmental Impacts. *J. Appl. Ichthyol.* **17**: 163-172
20. **Karakassis I**. (2001) Ecological effects of fish farming in the Mediterranean. *Cahiers Options Méditerranéennes* **55**: 15-22.
21. **Karakassis I**, Tsapakis M, Smith CJ, Rumohr H (2002) Fish farming impacts in the Mediterranean studied through sediment profiling imagery. *Marine Ecology Progress Series*, **227**: 125-133
22. Smith C, Rumohr H, **Karakassis I**, Papadopoulou KN (2003) Analysing the impact of bottom trawls on sedimentary seabeds with sediment profile imagery. *Journal of Experimental Marine Biology and*

Ecology, **285-286**: 479-496.

23. Tsapakis M, Stephanou E, **Karakassis I** (2003) Evaluation of atmospheric transport as a non-point source of polycyclic aromatic hydrocarbons in marine sediments of the Eastern Mediterranean. *Marine Chemistry*, **80**: 283-298
24. Machias A, **Karakassis I**, Labropoulou M, Somarakis S, Papadopoulou KN, Papaconstantinou C (2004) Changes in wild fish assemblages after the establishment of a fish farming zone in an oligotrophic marine environment. *Estuarine coastal shelf Science* **60**: 771-779
25. Machias A, **Karakassis I**, Somarakis S, Giannoulaki M, Papadopoulou KN, Smith C (2005) The response of demersal fish communities to the presence of fish farms. *Marine Ecology Progress Series*, **288**: 241-250
26. Pitta P, **Karakassis I** (2005) Size distribution in ultraphytoplankton: a comparative analysis. *Environmental Monitoring & Assessment* **102**: 85-101
27. **Karakassis I**, Pitta P, Krom MD (2005). Contribution of fish farming to the nutrient loading of the Mediterranean. *Scientia Marina*. **69**:313-321
28. Hyland J, Balthis L, **Karakassis I**, Magni P, Petrov A, Shine J, Vestergaard O, Warwick R (2005) Organic carbon content of sediments as an indicator of stress in the marine benthos. *Marine Ecology Progress Series* **295**:91-103
29. Lampadariou N, **Karakassis I**, Teraschke S, Arlt G (2005) Benthic meiofaunal response to organic enrichment induced by fish farming in the Eastern Mediterranean. *Vie et Milieu* **55**:61-69
30. Moustakas A, **Karakassis I** (2005) How diverse is Aquatic Biodiversity Research?. *Aquatic Ecology* **39**:367-375
31. Giannoulaki M, Machias A, Somarakis S, **Karakassis I** (2005) Wild fish spatial structure in response to presence of fish farms. *J. Mar. Biol Assoc UK* **85**: 1271-1277
32. Pitta P, Apostolaki ET, Giannoulaki M, **Karakassis I** (2005) Meso-scale changes in the water column in response to aquaculture zones in three coastal areas in the Eastern Mediterranean Sea. *Estuarine coastal shelf Science* **65**: 501-512
33. Lampadariou N, **Karakassis I**, Pearson TH (2005) Cost/benefit analysis of a benthic monitoring programme of organic benthic enrichment using different sampling and analysis methodology. *Marine Pollution Bulletin* **50**:1606-1618
34. **Karakassis I**, Machias A, Pitta P, Papadopoulou KN, Smith CJ, Apostolaki E, Giannoulaki M, Koutsoubas D, Somarakis S (2006) Cross-community congruence of patterns in a marine ecosystem: do the parts reflect the whole? *Marine Ecology Progress Series* **310**: 47-54
35. Tsapakis M, Pitta P, **Karakassis I** (2006) Nutrients and fine particulate matter released during sea bass (*D. labrax*) farming. *Aquatic Living Resources* **19**: 69-75
36. Kaiser MJ, Clarke KR, Hinz H, Austen MC, Somerfield PJ, **Karakassis I** (2006) Global analysis of the response and recovery of benthic biota to fishing. *Marine Ecology Progress Series* **311**: 1-14 (**Feature Article**)
37. Androurlidakis I, **Karakassis I** (2006) Evaluation of the EIA system performance in Greece using quality indicators. *Environmental Impact Assessment Review* **26**: 242-256
38. Cook EJ, Black KD, Sayer MDJ, Cromey CJ, Angel D, Spanier E, Tsemel A, Katz T, Eden N, **Karakassis I**, Tsapakis M, Apostolaki E, Malej A (2006) The influence of caged mariculture on the early development of sublittoral fouling communities: a pan-European study. *ICES Journal of Marine Science* **63**: 637-649
39. Pitta P, Apostolaki E, Tsagaraki T, Tsapakis M, **Karakassis I** (2006) Fish farming effects on chemical and microbial variables of the water column: A spatio-temporal study along the Mediterranean Sea. *Hydrobiologia* **563**: 99-108
40. Kalantzi I, **Karakassis I** (2006) Benthic impacts of fish farming: meta-analysis of community and geochemical data. *Marine Pollution Bulletin* **52**: 484-493
41. Machias A, Giannoulaki M, Somarakis S, Maravelias CD, Neofitou C, Koutsoubas D, Papadopoulou K-N, **Karakassis I** (2006) Fish farming effects on local fisheries landings in oligotrophic seas. *Aquaculture* **261**: 809-816

42. Apostolaki E, Tsagaraki T, Tsapakis M, **Karakassis I** (2007) Fish farming impact on sediments and macrofauna associated with seagrass meadows in the Mediterranean. *Estuarine coastal shelf Science* **75**:408-416
43. Lampadariou N, Akoumianaki I, **Karakassis I** (2008) Use of the size fractionation of the macrobenthic biomass for the rapid assessment of benthic organic enrichment. *Ecological Indicators* **8**: 729-742
44. Tsagarakis K, Machias A, Giannoulaki M, Somarakis S, **Karakassis I** (2008) Seasonal and temporal trends in metrics of fish community for otter-trawl discards in a Mediterranean ecosystem. *ICES Journal of Marine Science* **65**:539-550
45. Diaz-Almela E, Marba N, Alvarez E, Santiago R, Holmer M, Grau A, Danovaro R, Argyrou M, **Karakassis I**, Duarte CM (2008) Rapid seagrass (*Posidonia oceanica*) decline linked to Mediterranean fish farm inputs. *Marine Pollution Bulletin* **56**:1332-1342
46. Holmer M, Argyrou M, Dalsgaard T, Danovaro R, Diaz-Almela E, Duarte CM, Frederiksen M, Grau A, **Karakassis I**, Marbà N, Mirto S, Pérez M, Pusceddu A, Tsapakis M (2008) Effects of fish farm waste on *Posidonia oceanica* meadows: synthesis and provision of monitoring and management tools. *Marine Pollution Bulletin* **56**:1618-1629
47. Pitta P, Tsapakis M, Apostolaki ET, Tsagaraki T, Holmer M, **Karakassis I** (2009) 'Ghost nutrients' from fish farms are transferred up the food web by phytoplankton grazers. *Marine Ecology Progress Series* **374**:1-6 (*Feature Article*)
48. Apostolaki ET, Marba N, Holmer M., **Karakassis I** (2009) Fish farming impact on decomposition of *Posidonia oceanica* detritus. *J. exper mar biol ecol.* **369**:58-64
49. Apostolaki ET, Marba N, Holmer M, **Karakassis I** (2009) Fish farming enhances mass and nutrient loss in (*Posidonia oceanica*). *Estuarine coastal shelf Science* **81**:390-400.
50. Vanden Berghe E, Claus S, Appeltans W, Faulwetter S, Arvanitidis C, Somerfield P, Aleffi IF, Amouroux JM, Anisimova N, Bachelet G, Cochrane SJ, Costello MJ, Craeymeersch J, Dahle S, Degraer S, Denisenko S, Dounas C, Duineveld G, Emblow C, Escaravage V, Fabri MC, Fleischer D, Grémare A, Herrmann M, Hummel H, **Karakassis I**, Kędra M, Kendall M, Kingston P, Kotwichi L, Labrune C, Laudien J, Nevrova H, Occhipinti-Ambrogi A, Olsgard F, Palerud R, Petrov A, Rachor E, Revkov N, Rumohr H, Sardá R, Sisternans WCH, Speybroeck J, Janas U, Van Hoey G, Vincx M, Whomersley P, Willems W, Włodarska-Kowalczyk M, Zenetos A, Zettler ML, Heip C (2009) 'MacroBen' integrated database on benthic invertebrates of European continental shelves: a tool for large-scale analysis across Europe. *Marine Ecology Progress Series* **382**: 225-238
51. Renaud PE, Webb TJ, Bjørgesæter A, **Karakassis I**, Kędra M, Kendall MA, Labrune C, Lampadariou N, Somerfield PJ, Włodarska-Kowalczyk M, Vanden Berghe E, Claus S, Aleffi F, Amouroux JM, Bryne KH, Cochrane SJ, Dahle S, Degraer S, Denisenko SG, Deprez T, Dounas C, Fleischer D, Gil J, Grémare A, Janas U, Mackie ASY, Palerud R, Rumohr H, Sardá R, Speybroeck J, Taboada S, Van Hoey G, Węśławski JM, Whomersley P, Zettler ML (2009) Continental-scale patterns in benthic invertebrate diversity: Insights from the MarBEF database. *Marine Ecology Progress Series* **382**: 239-252
52. Escaravage V, Herman PMJ, Merckx B, Włodarska-Kowalczyk M, Amouroux JM, Degraer S, Grémare A, Heip CHR, Hummel H, **Karakassis I**, Labrune C, Willems W (2009) Productivity explains the distribution patterns of macrofauna species diversity in subtidal soft sediments. Results from a pan European dataset. *Marine Ecology Progress Series* **382**: 253-264
53. Arvanitidis C, Somerfield PJ, Rumohr H, Faulwetter S, Valavanis V, Vasileiadou A, Chatzigeorgiou G, Vanden Berghe E, Vanaverbeke J, Labrune C, Grémare A, Zettler ML, Kędra M, Włodarska-Kowalczyk M, Aleffi IF, Amouroux JM, Anisimova N, Bachelet G, Büntzow M, Cochrane S, Costello MJ, Craeymeersch J, Dahle S, Degraer S, Denisenko S, Dounas C, Duineveld G, Emblow C, Escaravage V, Fabri MC, Fleischer D, Gray JS, Heip C, Hermann M, Hummel H, Janas U, **Karakassis I**, Kendall MA, Kingston P, Kotwicki L, Laudien J, Mackie ASY, Nevrova HL, Occhipinti-Ambrogi A, Oliver PG, Olsgard F, Palerud R, Petrov A, Rachor E, Revkov NK, Rose A, Sardá R, Sisternans WCH, Speybroeck J, Van Hoey G, Vincx M, Whomersley P, Willems W, Zenetos A (2009) Biological geography of the European Seas: results from the macrofaunal inventory of the soft-substrate communities *Marine Ecology Progress Series* **382**: 265-278

54. Somerfield PJ, Arvanitidis C, Faulwetter S, Chatzigeorgiou G, Vasileiadou A, Amouroux J, Anisimova N, Cochrane S, Craeymeersch J, Dahle S, Denisenko S, Dounas K, Duineveld G, Grémare A, Heip C, Herrmann M, **Karakassis I**, Kędra M, Kendall M, Kingston P, Kotwichi L, Labrune C, Laudien J, Nevrova H, Nicolaidou A, Occhipinti-Ambrogi A, Palerud R, Petrov A, Rachor E, Revkov N, Rumohr H, Sardá R, Janas U, Vanden Berghe E, Włodarska-Kowalczyk M (2009) Assessing evidence for random assembly of marine benthic communities from regional species pools. *Marine Ecology Progress Series* **382**: 279-286
55. Webb TJ, Aleffi IF, Amouroux JM, Bachelet G, Degraer S, Dounas C, Dirk Fleischer D, Grémare A, Herrmann M, Hummel H, **Karakassis I**, Kędra M, Kendall MA, Kotwicki L, Labrune C, Nevrova EL, Occhipinti-Ambrogi A, Petrov A, Revkov NK, Sardá R, Simboura N, Speybroeck J, Van Hoey G, Vincx M, Whomersley P, Willems W, Włodarska-Kowalczyk M (2008) Macroecology of the European soft sediment benthos: insights from the Macroben database. *Marine Ecology Progress Series* **382**: 287-296
56. Grémare A, Labrune C, Vanden Berghe E, Amouroux JM, Bachelet G, Zettler ML, Vanaverbeke J, Fleischer D, Bigot L, Maire O, Deflandre B, Craeymeersch J, Degraer S, Dounas C, Duineveld G, Heip C, Herrmann M, Hummel H, **Karakassis I**, Kedra M, Kendall M, Kingston P, Laudien J, Occhipinti-Ambrogi A, Rachor E, Sardá R, Speybroeck J, Van Hoey G, Vincx M, Whomersley P, Willems W, Włodarska-Kowalczyk M, Zenetos A (2009) Comparison of the performances of two biotic indices based on a soft-bottom macrozoobenthos pan-European database. *Marine Ecology Progress Series* **382**:297-311
57. Moustakas A, **Karakassis I** (2009) Are a country's lifestyle and geomorphology linked with published aquatic biodiversity research? *Stochastic Environmental Research and Risk Assessment* **23**:737-748
58. Borja A, Germán Rodríguez J, Black K, Bodoy A, Emblow C, Fernandes TF, Forte J, **Karakassis I**, Muxika I, Nickell TD, Papageorgiou N, Pranovi F, Sevastou K, Tomassetti P, Angel D (2009) Assessing the suitability of a range of benthic indices in the evaluation of environmental impact of fin and shellfish aquaculture located in sites across Europe. *Aquaculture* **293**:231-240
59. Papageorgiou N, Sigala K, **Karakassis I** (2009) Changes of macrofaunal functional composition at sedimentary habitats in the vicinity of fish farms. *Estuarine Coastal Shelf Science* **83**:561-568
60. Duarte CM, Holmer M, Olsen Y, Soto D, Marbà N, Guiu J, Black K, **Karakassis I** (2009) Will the oceans help feed humanity? *Bioscience* **59**:967-976
61. Teixeira H, Borja A, Weisberg S, Ranasinghe J, Cadien D, Dauer D, Dauvin JC, Degraer S, Diaz R, Grémare A, **Karakassis I**, Llansó R, Lovell L, Marques J, Montagne D, Occhipinti-Ambrogi A, Rosenberg R, Sardá R, Schaffner L, Velarde R, (2010) Assessing Coastal Benthic Macrofauna Community Condition Using Best Professional Judgment - developing consensus across North America and Europe. *Marine Pollution Bulletin* **60**:589-600
62. Papageorgiou N, Kalantzi I, Karakassis I (2010) Effects of fish farming on different sediment types of the Mediterranean Sea. *Marine Environmental Research* **69**:326-336
63. Apostolaki ET, Marba N, Holmer M, **Karakassis I** (2010) Degrading seagrass (*Posidonia oceanica*) ecosystems: a source of dissolved matter to the Mediterranean. *Hydrobiologia* **649**: 13-23
64. Tsapakis M, Dakanali E, Stephanou EG, **Karakassis I** (2010) PAHs and n-alkanes in Mediterranean coastal marine sediments: Aquaculture as a significant point source. *Journal of Environmental Monitoring* **12**:958-963
65. Apostolaki ET, Marba N, Holmer M, **Karakassis I** (2010) Metabolic imbalance in coastal vegetated (*Posidonia oceanica*) and unvegetated benthic ecosystems. *Ecosystems* **13**: 459-471
66. Tsagaraki TM, Petihakis G, Tsiaras K, Triantafyllou G, Tsapakis M, Korres G, Kakagiannis G, Frangoulis C, **Karakassis I** (2011) Beyond the cage: Ecosystem modelling for impact evaluation in aquaculture. *Ecological Modelling* **222**: 2512-2523
67. Apostolaki ET, Holmer M, Marbů N, **Karakassis I** (2011) Epiphyte dynamics and carbon metabolism in a nutrient enriched Mediterranean seagrass (*Posidonia oceanica*) ecosystem. *Journal of Sea Research* **66**: 135-142
68. Palialexis A, Georgakarakos S, **Karakassis I**, Lika K, Valavanis VD (2011) Fish distribution predictions from different points of view: Comparing associative neural networks, geostatistics and

- regression models. *Hydrobiologia* **670**: 165-188.
69. Palialexis A, Georgakarakos S, **Karakassis I**, Lika K, Valavanis VD (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.
 70. Apostolaki ET, Holmer M, Marbū N, **Karakassis I** (2011) Reduced carbon sequestration in a Mediterranean seagrass (*Posidonia oceanica*) ecosystem impacted by fish farming. *Aquaculture Environment interactions* **2**:49-59
 71. Rountos KJ, Peterson BJ, **Karakassis I** (2012) Indirect effects of fish cage aquaculture on shallow *Posidonia oceanica* seagrass patches in coastal Greek waters. *Aquaculture Environment interactions* **2**:105-115
 72. Apostolaki ET, Vizzini S, **Karakassis I** (2012) Leaf vs. epiphyte nitrogen uptake in a nutrient enriched Mediterranean seagrass (*Posidonia oceanica*) meadow. *Aquatic Botany*, **96**: 58-62
 73. Cromey CJ, Thetmeyer H, Lampadariou N, Black KD, Koegeler J, **Karakassis I** (2012) MERAMOD - predicting the deposition and benthic impact of aquaculture in the Eastern Mediterranean. *Aquaculture Environment interactions* **2**: 157-176
 74. Dimitriou PD, Apostolaki ET, Papageorgiou N, Reizopoulou S, Simboura N, Arvanitidis C, **Karakassis I** (2012) Meta-analysis of a large data set with Water Framework Directive indicators and calibration of a Benthic Quality Index at the family level. *Ecological Indicators* **20**: 101-107.
 75. Sanz-Lázaro C, Malea P, Apostolaki ET, Kalantzi I, Marín A, **Karakassis I** (2012) The role of the seagrass *Posidonia oceanica* in the cycling of trace elements. *Biogeoscience* **9**: 2497-2507
 76. Kalantzi I, Shimmield TM, Pergantis SA, Papageorgiou N, Black KD, **Karakassis I** (2013) Heavy metals, trace elements and sediment geochemistry at four Mediterranean fish farms. *Science of the Total Environment*, **444**:128-137
 77. **Karakassis I**, Dimitriou PD, Papageorgiou N, Apostolaki ET, Lampadariou N, Black KD (2013) Methodological considerations on the coastal and transitional benthic indicators proposed for the Water Framework Directive. *Ecological Indicators* **29**:26-33
 78. Kalantzi I, Black KD, Pergantis SA, Shimmield TM, Papageorgiou N, Sevastou K, **Karakassis I** (2013) Metals and other elements in tissues of wild fish from fish farms and comparison with farmed species in sites with oxic and anoxic sediments. *Food Chemistry* **141**: 680-694
 79. **Karakassis I**, Papageorgiou N, Kalantzi I, Sevastou K, Koutsikopoulos C (2013) Adaptation of fish farming production to the environmental characteristics of the receiving marine ecosystems: A proxy to carrying capacity. *Aquaculture* **408–409**:184-190
 80. Moraitis M, Papageorgiou N, Dimitriou PD, Petrou A, **Karakassis I** (2013) Effects of offshore tuna farming on benthic assemblages in the Eastern Mediterranean. *Aquaculture Environment interactions* **4**:41-51
 81. Tsagaraki TM, Pitta P, Frangoulis C, Petihakis G, **Karakassis I** (2013) Plankton response to nutrient enrichment is maximized at intermediate distances from fish farms. *Marine Ecology Progress Series* **493**: 31-42
 82. Kalantzi I, Papageorgiou N, Sevastou K, Black KD, Pergantis SA, **Karakassis I** (2014) Metals in benthic macrofauna and biogeochemical factors affecting their trophic transfer to wild fish around fish farm cages. *Science of the Total Environment*, **470-471**: 742-753
 83. Fodelianakis S, Pitta P, Thingstad TF, Kasapidis P, **Karakassis I**, Ladoukakis ED (2014) Phosphate addition has minimal short-term effects on bacterioplankton community structure of the P-starved Eastern Mediterranean. *Aquatic Microbial Ecology* **72**:98-106
 84. Fodelianakis S, Papageorgiou N, Pitta P, Kasapidis P, **Karakassis I**, Ladoukakis ED (2014) The Pattern of Change in the Abundances of Specific Bacterioplankton Groups Is Consistent across Different Nutrient-Enriched Habitats in Crete. *Applied and Environmental Microbiology*, **80** :3784-3792
 85. Fodelianakis S, Papageorgiou N, **Karakassis I**, Ladoukakis ED (2015) Community structure changes in sediment bacterial communities along an organic enrichment gradient associated with fish farming. *Annals of Microbiology* **65**:331-338
 86. Sanz-Lázaro C, Fodelianakis S, Guerrero-Meseguer L, Marín A, **Karakassis I** (2015) Effects of organic pollution on biological communities of marine biofilm on hard substrata. *Environmental Pollution* **201**: 17-25

87. Jackson D, Drumm A, McEvoy S, Jensen Ø, Mendiola D, Gabiña G, Borg JA, Papageorgiou N, **Karakassis I**, Black KD (2015) A pan-European valuation of the extent, causes and cost of escape events from sea cage fish farming. *Aquaculture* **436**: 21-26
88. Patel SH, Panagopoulou A, Morreale SJ, Kilham SS, **Karakassis I**, Riggall T, Margaritoulis D, Spotila JR (2015) Differences in size and reproductive output of loggerhead turtles *Caretta caretta* nesting in the Eastern Mediterranean Sea are linked to foraging site. *Marine Ecology Progress Series* **535**:231-241
89. Dimitriou PD, Papageorgiou N, Arvanitidis C, Assimakopoulou G, Pagou K, Papadopolou KN, Pavlidou A, Pitta P, Reizopoulou S, Simbora N, **Karakassis I** (2015) One Step forward: Benthic Pelagic Coupling and Indicators for Environmental Status. *PLOS ONE* **10** (10), e0141071
90. Dimitriou PD, **Karakassis I**, Pitta P, Tsagaraki TM, Apostolaki ET, Magiopoulos I, Nikolioudakis N, Diliberto S, Theodorou JA, Tzovenis I, Kagalogi I, Beza P, Tsapakis M (2015) Mussel farming in Maliakos Gulf and quality indicators of the marine environment: Good benthic below poor pelagic ecological status. *Marine Pollution Bulletin* **101**:784-793
91. Kalantzi I, Pergantis SA, Black KD, Shimmield TM, Papageorgiou N, Tsapakis M, **Karakassis I** (2016) Metals in tissues of seabass and seabream reared in sites with oxic and anoxic substrata and risk assessment for consumers. *Food Chemistry* **194**:659-670
92. Sanchez-Jerez P, **Karakassis I**, Massa F, Fezzardi D, Aguilar-Manjarrez J, Soto D, Chapela R, Avila P, Macias JC, Tomasetti P, Marino G, Borg J, Franičević V, Yucel-Gier G, Fleming I, Biao X, Nhahla H, Hamza H, Forcada A, Dempster T (2016) Aquaculture's struggle for space: the need for coastal spatial planning and the potential benefits of Allocated Zones for Aquaculture (AZA) to avoid conflict and promote sustainability. *Aquaculture Environment Interactions* **8**:41-54
93. Romero-Ramirez A, Bonifácio P, Labruno C, Sardá R, Amouroux JM, Bellan G, Duchêne JC, Hermand R, **Karakassis I**, Dounas C, Grémare A (2016) Long-term (1998-2010) large-scale comparison of the ecological quality status of gulf of lions (NW Mediterranean) benthic habitats. *Marine Pollution Bulletin* **102**:102-113
94. Fodelianakis S, Moustakas A, Papageorgiou N, Manoli O, Tsikopoulou I, Michoud G, Daffonchio D, **Karakassis I**, Ladoukakis ED (2017) Modified niche optima and breadths explain the historical contingency of bacterial community responses to eutrophication in coastal sediments. *Molecular Ecology* **26**:2006-2018
95. Dimitriou PD, Papageorgiou N, Geropoulos A, Kalogeropoulou V, Moraitis M, Santi I, Tsikopoulou I, Pitta P, **Karakassis I** (2017) A novel mesocosm setup for benthic-pelagic coupling experiments. *Limnology and Oceanography: Methods* **15**:349-362
96. Dimitriou PD, Papageorgiou N, Geropoulos A, Kalogeropoulou V, Moraitis M, Santi I, Tsikopoulou I, Pitta P, **Karakassis I** (2017) Benthic pelagic coupling in a mesocosm experiment: Delayed sediment responses and regime shifts. *Science of the Total Environment* **605–606**:637-645.
97. Dimitriou PD, Papageorgiou N, **Karakassis I** (2017) Response of benthic macrofauna to eutrophication in a mesocosm experiment: ecosystem resilience prevents hypoxic conditions. *Frontiers in Marine Science* **4**(DEC), 391
98. Apostolaki ET, Holmer M, Santinelli V, **Karakassis I** (2018) Species-specific response to sulfide intrusion in native and exotic Mediterranean seagrasses under stress. *Marine Environmental Research* **134**:85-95
99. Moraitis ML, Tsikopoulou I, Geropoulos A, Dimitriou PD, Papageorgiou N, Giannoulaki M, Valavanis VD, **Karakassis I** (2018) Molluscan indicator species and their potential use in ecological status assessment using species distribution modeling. *Marine Environmental Research* **140**:10-17
100. Tsikopoulou I, Moraitis ML, Tsapakis M, **Karakassis I** (2018) Can intensive fish farming for 20 years induce changes in benthic ecosystems on a scale of water body? An assessment from Cephalonia Bay (Ionian Sea). *Environmental Monitoring & Assessment* **190**(8),469
101. Tsikopoulou I, Moraitis ML, Geropoulos A, Papadopolou KN, Papageorgiou N, Plaiti W, Smith CJ, **Karakassis I**, Eleftheriou A (2019). Long-term changes in the structure of benthic communities: Revisiting a sampling transect in Crete after 24 years. *Marine Environmental Research*, **144**:9-19
102. Tsikopoulou I, Smith CJ, Papadopolou NK, Eleftheriadou E, **Karakassis I** (2019) A fishing ground benthic ecosystem improved during the economic crisis. *ICES Journal of Marine Science*, **76**(2): 402-

103. Piperagkas O, Papageorgiou N, **Karakassis I** (2019) Qualitative and quantitative assessment of microplastics in three sandy Mediterranean beaches, including different methodological approaches. *Estuarine, Coastal and Shelf Science*, **219**, 169-175
104. Tsikopoulou I, Papageorgiou N, Tsiavos T, Fodelianakis S, Kotzabasis K, **Karakassis I** (2019) Microphytobenthic response to organic matter enrichment: Does the same stressor lead to identical communities? *Regional Studies in Marine Science*, **29**, 100682
105. Moraitis ML, Valavanis VD, **Karakassis I** (2019) Modelling the effects of climate change on the distribution of benthic indicator species in the Eastern Mediterranean Sea. *Science of the Total Environment*, **667**, 16-24.
106. Santi I, Tsiola A, Dimitriou PD, Fodelianakis S, Kasapidis P, Papageorgiou N, Daffonchio D, Pitta P, **Karakassis I** (2019) Prokaryotic and eukaryotic microbial community responses to N and P nutrient addition in oligotrophic Mediterranean coastal waters: Novel insights from DNA metabarcoding and network analysis. *Marine Environmental Research*, **150**, 104752
107. Tsikopoulou I, Santi I, Dimitriou PD, Papageorgiou N, Pitta P, **Karakassis I** (2020) Response of Microphytobenthos and Benthic Bacteria Viability to Eutrophication in a Benthic–Pelagic Coupling Mesocosm Experiment. *Frontiers in Marine Science*, **7**:270
108. Tsiola A, Michoud G, Fodelianakis S, **Karakassis I**, Kotoulas G, Pavlidou A, Pavludi C, Pitta P, Simbora N, Daffonchio D, Tsapakis M (2020) Viral metagenomic content reflects seawater ecological quality in the Coastal Zone. *Viruses* **12**(8):806
109. Moraitis ML, **Karakassis I** (2020) Assessing large-scale macrobenthic community shifts in the Aegean Sea using novel beta diversity modelling methods. Ramifications on environmental assessment. *Science of the Total Environment*, **734**:139504
110. Tsikopoulou I, Lampa M, Tsiola A, Pitta P, Tsapakis M, **Karakassis I** (2021) Functional adaptations of benthic communities to organic matter enrichment at the edge of an allowable zone of effect (AZE) *Estuarine, Coastal and Shelf Science* **262**, art. no. 107596
111. Santi I, Kasapidis P, **Karakassis I**, Pitta P (2021) A comparison of DNA metabarcoding and microscopy methodologies for the study of aquatic microbial eukaryotes. *Diversity* **13**(5), art. no. 180
112. Tsikopoulou I, Dimitriou PD, **Karakassis I**, Lampadariou N, Papadopoulou N, Smith C (2021) Temporal variation in the ecological functioning of benthic communities after 20 years in the Eastern Mediterranean. *Frontiers in Marine Science*, **8**, 768051, DOI: 10.3389/fmars.2021.768051
113. Papageorgiou N, Dimitriou PD, Moraitis ML, Fezzardi D, Massa F, **Karakassis I** (2021) Changes of the Mediterranean fish farm sector towards a more sustainable approach: a closer look at temporal, spatial and technical shifts. *Ocean and Coastal Management*, **214**, art. no. 105903,
114. Vetsis E, Kalantzi I, Pergantis SA, Kokokiris L, **Karakassis I** (2021) Metals in tissues of marine fish from the Thermaikos Gulf, Eastern Mediterranean Sea: detection of changes with trophic level. *Marine Pollution Bulletin* **173**, art. no. 113024.
115. Chatzivasileiou D, Dimitriou PD, Theodorou J, Kalantzi I, Magiopoulos I, Papageorgiou N, Pitta P, Tsapakis M, **Karakassis I** (2022) An IMTA in Greece: Co-Culture of Fish, Bivalves, and Holothurians. *Journal of Marine Science and Engineering*, **10** (6), art. no. 776
116. Dimitriou PD, Santi I, Moraitis ML, Tsikopoulou I, Pitta P, **Karakassis I** (2022) Benthic–Pelagic Coupling in the Oligotrophic Eastern Mediterranean: A Synthesis of the HYPOXIA Project Results. *Frontiers in Marine Science*, **9**, art. no. 886335
117. Chatzivasileiou D, Dimitriou PD, Theodorou J, Kalantzi I, Magiopoulos I, Papageorgiou N, Pitta P, Tsapakis M, **Karakassis I** (2022) An IMTA in Greece: Co-Culture of fish, bivalves, and holothurians. *Journal of Marine Science and Engineering*, **10** (6), art. no. 776, .
118. Papageorgiou N, Dimitriou PD, Chatzivasileiou D, Tsapakis M, **Karakassis I** (2023) Can IMTA provide added ecosystem value services in the fish farms of Greece? *Frontiers in Marine Science*, **9**, art. no. 1083099,
119. Manolaki SM, Chatzivasileiou D, Lampa M, Dimitriou PD, Philippidis A, **Karakassis I**, Papageorgiou N, (2023) Microplastic contamination in cultured mussels and pearl oysters in Greece. *Microplastics*

2:168-181.

120. Smith CJ, Papadopoulou NK, Maina I, Kavadas S, van Denderen PD, Katsiaras N, Reizopoulou S, **Karakassis I**, Tselepides A, Tsikopoulou I (2023) Relating benthic sensitivity and status to spatial distribution and intensity of trawling in the Eastern Mediterranean. *Ecological Indicators*, **150**, art. no. 110286,
121. Tsikopoulou I, Chatzivasileiou D, Dimitriou PD, Magiopoulos I, Papageorgiou N, **Karakassis I** (2023) Contribution of holothuroids to the bioremediation and stimulation of the benthic microbial metabolism in aquaculture. *Marine Pollution Bulletin*, **194**, art. no. 115418, DOI: <https://doi.org/10.1016/j.marpolbul.2023.115418>
122. Zhao Y, Song M, Yu Z, Pang L, Zhang L, **Karakassis I**, Dimitriou PD, Yuan X (2023) Transcriptomic Responses of a Lightly Calcified Echinoderm to Experimental Seawater Acidification and Warming during Early Development. *Biology*, **12** (12), art. no. 1520, DOI: <https://doi.org/10.3390/biology12121520>
123. Chatzivasileiou D, Dimitriou PD, Tsikopoulou I, Lampa M, Papageorgiou N, Tsapakis M, **Karakassis I** (2024) Holothurians play an important role in mitigating the impacts of aquaculture on sediment conditions. *Marine Pollution Bulletin*, **198**, art. no. 115856, DOI: <https://doi.org/10.1016/j.marpolbul.2023.115856>
124. Litsi-Mizan V, Kalantzi I, Tsapakis M, Pergantis SA, **Karakassis I**, Apostolaki ET (2012) Trajectories of trace element accumulation in seagrass (*Posidonia oceanica*) over a decade reveal the footprint of fish farming. *Environmental Science and Pollution Research*, DOI: <https://doi.org/10.1007/s11356-024-32910-0>
125. Lampa M, **Karakassis I**, Langeneck J, Rousou M, Apserou C, Chrysanthou K, Constantinou G, Kletou D, Kleitou P, Louzidou P, Moraitis ML, Papadopoulos V, Patsalidou M, Petrou A, Dimitriou PD (2025) Long-term assessment of benthic ecological status in sediments affected by offshore aquaculture: The case of the Republic of Cyprus. *Marine Pollution Bulletin*, **219** 118332, DOI: <https://doi.org/10.1016/j.marpolbul.2025.118332>
126. Graversen AEL, Lønborg C, Addamo AM, Pedersen SG, Chemello S, [...] , **Karakassis I**, ... (2025) A marine and salt marsh sediment organic carbon database for European regional seas (EURO-CARBON). *Data in brief* **60**, 111595, DOI: <https://doi.org/10.1016/j.dib.2025.111595>
127. Manolaki SM, Dimitriou PD, Lampa M, **Karakassis I**, Papageorgiou N (2025) Microplastic concentration of Mediterranean commercial fish: A systematic review. *Microplastics* (*in press*)
128. Chatzivasileiou D, Pananganan BGS, Dimitriou PD, Papageorgiou N, Lampa M, Manolaki S, Yu Z, Da Huo D, Yuan X, **Karakassis I** (2025) Use of Sediment Geochemistry and Video Analysis for habitat description of the sea cucumber *Holothuria poli* Delle Chiaje, 1823. *Mediterranean Marine Science* (*in press*)
129. Chatzivasileiou D, Baltadakis A, Dimitriou PD, Magiopoulos I, Pergantis SA, Manolis Tsapakis M, **Karakassis I**, Ioanna Kalantzi I (2025) Metal Content in IMTA Products: Assessing Health Risks and Nutritional Benefits of Co-Cultured Bivalves and Holothurians in Fish Farm. *Aquaculture* (*in press*)
- 130.

Chapters & books

- Gowen RJ, **Karakassis I**, Tett P (1997) Cage farming of fish and the marine environment in Cyprus. *FAO*, Rome, 32 pp.
- Izzo G, Antonioli F, Zenetos A, **Karakassis I**, Kamizoulis G (1999) Ecosystem sensitivity and impacts. In: Izzo G., Moretti S. (eds.) "State and pressures of the marine and coastal Mediterranean Environment" European Environment Agency, Copenhagen. *Environmental issues series* **5**: 105-123.

- **Karakassis I** (2005) Environmental Impacts of fish farming. In: Papathanassiou E. & Zenetos A (eds) «State of the Hellenic Marine Environment», Hellenic Center for Marine Research (HCMR), Athens p 330-335. (ISBN 960-86651-8-3)
- **Karakassis I** (2007) Effects of aquaculture on Mediterranean marine ecosystems: findings of recent EU-funded projects and ongoing research activities. In: *CIESM Workshop Monographs* **32**: 35-38.
- Holmer M, Hansen PK, **Karakassis I**, Borg JA, Schembri PJ (2008) Monitoring of environmental impacts of Marine Aquaculture. In: Holmer M., Black K., Duarte C.M., Marba N., Karakassis I. (eds) *Aquaculture in the Ecosystem*. Springer pp 47-85.
- Holmer M., Black K., Duarte C.M., Marba N., **Karakassis I.** (eds) (2008) *Aquaculture in the Ecosystem*. Springer, 326pp
- **Καρακάσης Ι**, Σεβαστού Κ (2011) Διατροφή, Περιβάλλον και Ιχθυοκαλλιέργεια. In: Μεντέ Ε, Νέγκας Ι. (επιμ.) «Στοιχεία διατροφής και φυσιολογίας θρέψεως και εφαρμοσμένη διατροφή ιχθύων και καρκινοειδών». Εκδ. Παπαζήσης. Αθήνα, σελ. 595-621
- Papageorgiou N, **Karakassis I** (2012) Environmental interactions of marine aquaculture in the Mediterranean: current status and expected changes. In: Stabler N (Ed.) "Life in the Mediterranean Sea: A look at habitat changes". Nova Science Publishers, Inc pp. 617-634
- Ross LG, Telfer TC, Falconer L, Soto D, Aguilar-Manjarrez J, Asmah R, Bermúdez J, Beveridge MCM, Byron CJ, Clément A, Corner R, Costa-Pierce BA, Cross S, De Wit M, Dong S, Ferreira JG, Kapetsky JM, **Karakassis I**, Leschen W, Little D, Lundebye AK, Murray FJ, Phillips M, Ramos L, Sadek S, Scott PC, Valle-levinson A, Waley D, White PG, Zhu C (2013) Carrying capacities and site selection within the ecosystem approach to aquaculture. In LG Ross, TC Telfer, L. Falconer, D Soto & J Aguilar-Manjarrez, (eds.) Site selection and carrying capacities for inland and coastal aquaculture, pp. 19–46. FAO/Institute of Aquaculture, University of Stirling, Expert Workshop, 6–8 December 2010. Stirling, the United Kingdom of Great Britain and Northern Ireland. FAO Fisheries and Aquaculture Proceedings No. 21. Rome, FAO. 282 pp.
- **Karakassis I** (2013) Environmental interactions and initiatives on site selection and carrying capacity estimation for fish farming in the Mediterranean In LG Ross, TC Telfer, L. Falconer, D Soto & J Aguilar-Manjarrez, (eds.) Site selection and carrying capacities for inland and coastal aquaculture, pp 161–170. FAO/Institute of Aquaculture, University of Stirling, Expert Workshop, 6–8 December 2010. Stirling, the United Kingdom of Great Britain and Northern Ireland. FAO Fisheries and Aquaculture Proceedings No. 21. Rome, FAO. 282 pp [<https://www.fao.org/fishery/docs/CDrom/P21/root/09.pdf>]
- Macias JC, Avila Zaragoza P, **Karakassis I**, Sanchez-Jerez P, Massa F, Fezzardi D, Gier GY, Franičević V, Borg JA, Chapela Pérez RM, Tomassetti P, Angel D, Marino G, Nhhala H, Hamza, H, Carmignac C, Fourdain L (2019). Allocated zones for aquaculture: a guide for the establishment of coastal zones dedicated to aquaculture in the Mediterranean and the Black Sea. General Fisheries Commission for the Mediterranean. Studies and Reviews. No 97. Rome, FAO.
<https://openknowledge.fao.org/server/api/core/bitstreams/5c494a74-d1f9-4f9d-9b26-9ff8f3b0f634/content>