

PROFILE

Born on the French west coast, my childhood connection to the ocean fueled my dedication to marine environments. During my bachelor's degree, I had the opportunity to visit reef island ecosystems, where I sadly witnessed their vulnerability to climate change. In this context, I decided to pursue a Ph.D. on coastal protection in French Polynesia, focusing on benthic functionality and communities. My main interest lies into quantifying the shifts in ecosystem functioning due to global change, though a combination of fieldwork, experiments, and advanced statistical modelling across multiple spatial scales. In addition to my research pursuits, I also enjoy data analysis and visualization, aiming to communicate complex findings in clear and accessible ways.

PROFESSIONAL EXPERIENCE

- 2026. **Postdoctoral Fellow** in Mediterranean shifts in macrophyte functioning at the Institut de Ciències del Mar – Consejo Superior de Investigaciones Científicas (ICM–CSIC), Spain
- 2025. **Postdoctoral Fellow** in Marine ecosystem functions, and cumulative impact assessment across European seas at the Spanish Institute of Oceanography – Centre Oceanogràfic de les Balears (IEO–COB), Spain
- 2022. **Postdoctoral Fellow** in Marine functional diversity in the face of global changes at the Laboratoire d'Océanographie de Villefranche (LOV) & the Stazione Zoologica di Napoli (SZN), France & Italy
- 2021. **Research Fellow** in Spatio-temporal variability of coral reefs at the global scale: causalities, idiosyncrasies and implications for ecological indicators at Fondation pour la Recherche sur la Biodiversité (FRB), France.
- 2017. **Investigator** in Marine litter quantification and water quality at Surfrider Foundation Europe (SFE), France.

EDUCATION

- 2021. **Ph.D. on Coral reefs accretion, sea-level rise and waves energy in the face of global changes**
Paris Sciences et Lettres (PSL) University hosted at the Centre de Recherches Insulaires et Observatoire de l'Environnement (CRIOBE), French Polynesia and France
- 2016. **MSc. in Biodiversity, management and environment on coral reefs** with *great honours*, rank: 6/17
Ecole Pratique des Hautes Etudes, Paris, France
Main subjects: Coral reef biodiversity, Biodiversity of evolution, fishery & coral reef management
- 2015. **MSc. in Ecosystem approach in fisheries** with *great honours*, rank: 5/23
Ecole Nationale Supérieure d'Agrocampus-Ouest (*top school*), Rennes, France
Main subjects: Marine biology, Fisheries management, Bayesian statistics

ADDITIONAL TRAINING

- 2024. Functional trait diversity: calculating and interpreting a key component of biodiversity (16 hours).
Transmitting Science, Remote.
- 2022. Biodiversity knowledge synthesis: an introduction to meta-analyses and systematic reviews (35 hours).
Centre for Biodiversity Synthesis and Analysis (CESAB), Montpellier, France.

SCHOLARSHIPS, GRANTS & AWARDS (FUNDING ~166,675€)

- Grants
- 2025. [Vicenç Mut postdoctoral fellowship grant 2024](#) (~137,950€ – renounced)
Proposal 2024_44 - Unraveling functioning shifts in rhodolith beds under global change - July 8th, 2025
- 2025. [Beatriu de Pinós postdoctoral fellowship grant 2024](#) (~161,500€)
Proposal 2024BP00106 - Mediterranean shifts in macrophyte functioning - July 4th, 2025
- 2024. [European Marine Biological Resource Centre, Italy Grant](#) (~3,675€) – Excellent Research Project
Proposal 30720 - Synergies of Benthic Communities to Ocean Acidification - May 7th, 2024

- Awards & recognitions
- 2025. [European Commission Horizon Europe \(HORIZON-MSCA-2024-PF-01\)](#) – **Seal of Excellence** (rank 95.0%)
Proposal 101204405 - Mediterranean shifts in seaweed and seagrass functioning - February 9th, 2025
- 2024. [Institut de Ciències del Mar Award](#) (**1,000€**) – Top 5 highest-quality Expressions of Interests
Training to write a MSCA proposal & UN Ocean Decade - Barcelone, Spain - April 8th and 9th, 2024
- Scholarships
- 2016. [Société Française d'Ichtyologie scholarship](#) (**500€**) – Top 5 best student's abstract
Study of the fish distribution in French Polynesia - Marseille, France - May 26th and 27th, 2016

RESEARCH PROJECTS (6 PROJECTS INCLUDING 2 AS PROJECT LEADER)

- As Principal Investigator
- 2026. [MEDSHIFTS](#) – Mediterranean shifts in macrophyte functioning (~161,500€)
Principal investigator: **J. Carlot** & J. Garrabou
- 2024. [MEDSYNERGIES](#) – Synergies of benthic communities to ocean acidification (~3,675€)
Principal investigator: **J. Carlot** & N. Teixidó
- As Scientific Collaborator
- 2024. [B-USEFUL](#) – User-oriented Solutions for Improved Monitoring & Management of Biodiversity & Ecosystem services in vulnerable European Seas (~4,607,000€)
Principal investigator: M. Lindegren
- 2021. [4OCEANS](#) – Predicting future oceans under climate change (~745,000€)
Principal investigator: N. Teixidó
- 2020. [SCORE-REEF](#) – Spatio-temporal variability of coral reefs at the global scale: causalities, idiosyncrasies and implications for ecological indicators (~220,000€)
Principal investigator: M. Adjeroud & V. Parravicini
- 2018. [REEF SERVICES](#) – Measuring and predicting the consequences of global warming on the coral reefs and the services they provide (~800,000€)
Principal investigator: V. Parravicini

SPECIALIZED SKILLS

- Fieldwork and Laboratory
 - Coral growth measures by staining (*in situ*), by alkalinity anomaly method (*ex situ*)
 - Benthic complexity definition (chain-tape method and photogrammetry)
 - Coral underwater identification (genus level for coral, family level for reef fishes)
 - Benthic metabolism incubation experiments (photosynthesis, calcification, respiration, nutrient cycling)
 - Reef fish capture using clove oil technics
- Statistics (R software)
 - Bayesian, frequentist and descriptive statistics
 - Huge database management, homogenization and use of GitHub and GitLab for better reproducibility
 - Advanced knowledge in modelling (General Linear Model, General Additive Models, Mixed Models) and multivariate analysis (NMDS, PCA, CA, PCoA, RDA, GPA)
- Cartography (ArcGIS & QGIS softwares)
 - Spatial analysis (e.g., buffer, intersection, union)
 - Cumulative impacts
- Image analysis (Agisoft Metashape and ImageJ softwares)
 - Photogrammetry (e.g., Transect or species)
 - Measures of precision (*i.e.*, length, volume and surface definition)
- Languages
 - French: mother tongue
 - English: Fluent speaking, reading, and writing.
 - Spanish: Fluent speaking, reading, and writing.
 - Catalan: Basic understanding

- Italian: Basic understanding

- Diving and driving diplomas

- Diver CAH1B (French professional qualification, revised in 2022), N3 FFESSM (=CMAS***) ~900 dives
- Driving and Boating Licenses.

LECTURES (52 HOURS)

- **Course Lecturer of 1 course on *Temperate marine benthic ecology*** (SZN)
 - Benthic physiology & processes: from field to data analysis (8 hours) Summer School (2025)
- **Course Lecturer of 5 courses on *Reproducible Science & Statistics*** (CNRS | CESAB | CSIC | SZN)
 - Integrate Zotero with Obsidian (1 hour) Lab on-demand (2025)
 - GitHub & Markdown: Core tools for your research workflow (4 hours) Summer School (2025)
 - The use of Bayesian statistics in ecology (1 hour) Lab on-demand (2024)
 - How to do reproducible science? The GitHub endeavour (4 hours) Lab on-demand (2023,2025)
 - A fully reproducible workflow for meta-analyses in R (4 hours) Lab on-demand (2023)
 - Preliminary results from a meta-analysis using natural analogs (1 hour) CESAB Formation (2023)
- **University Lecturer of 5 courses on *Coral Reefs*** (EPHE)
 - Coastal protection and reef functioning (MOOC) (45 minutes) MSc class (2021-2025)
 - Functional ecology in Corals Reefs (4 hours) MSc class (2020-2021)
 - Coral growth and Coastal protection in Corals Reefs (4 hours) MSc class (2020-2021)
 - Diversity-Habitat Relationship in Corals Reefs (8 hours) MSc class (2019)
 - Fish distribution in French Polynesia (MOOC) (15 minutes) MSc class (2016-2025)

SUPERVISION (6 STUDENTS)

- PhD. Students (1 student)

2024. **Gaia Grasso**. *Marine biodiversity and ecosystem function of benthic habitats in a changing ocean using novel underwater imaging approaches*
main PhD supervisors: N. Teixidó, S. Comeau & U. Cardini; **J. Carlot** (advisor)
- MSc. Students (5 students)

2024. **Karla Abril Hernandez Ramirez**. *Understanding ocean acidification effects on coastal marine ecosystems*.
2023. **Romane Torchy**. *Benthic functioning in the face of global change, a meta-analysis*.
2021. **Cyril Hautecoeur**. *Lack of vertical accretion capacity to keep up with future sea level rise*.
2019. **Martin Alessandrini & Hmeniko Tourancheau**. *Study of the growth of 3 coral species (*A. hyacinthus*, *P. verrucosa* and *P. lutea*) in a context of climate change*.

CONTRIBUTED TALKS (10 CONTRIBUTIONS)

2024. **Carlot., J.** et al. *Species trait impairment in the Mediterranean Sea following mortality events*
European Coral Reef Symposium (ECRS) (Naples, Italy)
2024. **Carlot., J.** et al. *Shallow Temperate Reefs * (Co-chairing the session)*
European Coral Reef Symposium (ECRS) (Naples, Italy)
2024. Teixido., N. et al. *Coral populations naturally occur in high pCO₂ environments on the coast of Ischia*
European Coral Reef Symposium (ECRS) (Naples, Italy)
2024. Comeau., S. et al. *Crustose coralline algae contribution to coral reef carbonate production*
European Coral Reef Symposium (ECRS) (Naples, Italy)
2024. Ponti, M. et al. *T-MEDNet: a collaborative network to track mass mortality events in the Mediterranean Sea*
8th European Conference on Scientific Diving (ECSD8) (Heraklion, Greece)
2024. Teixido., N. et al. *A window to the future: field research at unique CO₂ vents along the coast of Ischia (Italy)*
8th European Conference on Scientific Diving (ECSD8) (Heraklion, Greece)
2023. Palmisciano., M. et al. *Exploring the mechanisms of emergent community shifts along a CO₂ gradient*
Western Society of Naturalists Conference (WSNC) (Monterey, California)

2023. Boada., J. et al. *From macrophyte collapses to global environmental change mitigation agents*
International Temperate Reefs Symposium (ITRS) (Hobart, Tasmania)
2022. **Carlot., J.** et al. *Coral structural complexity loss highly threatens the coastline*
International Coral Reef Symposium (ICRS) (Bremen, Germany)
2021. **Carlot., J.** et al. *Coral carbonate production from juveniles assists coral reef recovery*
International Coral Reef Symposium (ICRS) (Bremen, Germany)

INVITED TALKS (5 PRESENTATIONS)

2025. *Functional shifts in Mediterranean fish communities over the past two decades*
Instituto Español Océanográfico (IEO) de los Baleares (Palma, Spain)
2024. *Ecological trait erosion in the Mediterranean Sea due to Mass Mortality Events*
Laboratoire d'Océanographie de Villefranche sur mer (LOV) (Villefranche sur mer, France)
2022. *Benthic Functioning in the face of global changes*
- Marine Ecological Data Analysis and Synthesis (MEDAS) Center (Ischia, Italy)
- Centre de Recherches Insulaires et Observatoire de l'Environnement (CRIOBE) (Perpignan, France)
2020. *Coastal protection: How to define scenarios of coastal protection for a reef island*
Instituto Español Océanográfico (IEO) de los Baleares (Palma, Spain)

OUTREACHES (6 CONTENTS)

- Trailers and videos
2025. B-useful – Meet the Scientist
<https://b-useful.eu/meetthescientist-jeremy-carlot-joins-b-useful-as-postdoctoral-researcher/>
2018. Reef Services – System Factory
<https://www.youtube.com/watch?v=Pr39lnkdqn0>
2015. Riverine Input by Surfrider Foundation Europe (French voice-over)
<https://www.youtube.com/watch?v=as0Y-c3f9gA&themeRefresh=1>
- Newspapers, newsletters and blogs
2025. Springer Research Communities - Behind the Paper
Vulnerability of benthic trait diversity across the Mediterranean Sea following Mass Mortality Events
<https://go.nature.com/4b7CYAq>
2023. IRD Newsletter
Récifs coralliens en bonne santé : de véritables brise-lames naturels
<https://www.ird.fr/recifs-coralliens-en-bonne-sante-de-veritables-brise-lames-naturels>
2023. Boukan Newspaper
Polynésie française, des récifs plus efficaces pour protéger les côtes
<https://boukan.press/polynesie-francaise-des-recifs-bien-portants-plus-efficaces>

REVIEWING CONTRIBUTIONS (38 REVIEWS)

Nature (1), NPJ Ocean Sustainability (1), Global Change Biology (4), Communications Earth & Environment (1), Functional Ecology (5), Coral Reefs (6), Scientific Reports (2), PeerJ (1), Marine Ecology Progress Series (2), Egosphere (2), Marine Biology (5), Royal Society Open Science (2), Journal of Experimental Marine Biology and Ecology (1), Hydrobiologia (1), Restoration Ecology (2), Journal of Phycology (1), Journal of Animal Ecology (1)

2025. Guest editor *Frontiers in Marine Science* on "Adaptation and Evolution in Marine Extreme Environments"

PUBLICATIONS (18 PUBLICATIONS)

Current statistics from [Google Scholar](https://scholar.google.com/) page: ≥ 575 citations, H-index = 11, i₁₀ index = 12

1) **Peer-reviewed articles**

18. Somma, E., Zupo, V., Mutalipassi, M., Ruocco, N., Terlizzi, A., Iamunno, F., **Carlot, J.** & Costantini, M. (2025) Strain Selection and Metabolic Shifts in the Benthic Diatom *C. neothumensis* Under Ocean Acidification. *Ecosystems* <https://doi.org/10.1007/s10021-025-00995-4>
17. **Carlot, J.**, Galobart, C., Gomez-Gras, D., Santamaria, J., Golo, R., Sini, M., Cebrian, E., Gerovasileiou, V., Ponti, M., Turicchia, E., Comeau, S., Rilov, G., Tamburello, L., Pulido Mantas, T., Cerrano, C., Ledoux, J-B., Gattuso, J-P., Ramirez-Calero, S., Millán Agudo, L., Montefalcone, M., Katsanevakis, S., Garrabou, J. & Teixidó, N. (2025) Vulnerability of benthic trait diversity across the Mediterranean Sea following Mass Mortality Events. *Nature Communications* <https://doi.org/10.1038/s41467-025-55949-0>
16. Brandl, S. J., **Carlot, J.**, Graham, N. A. J., Stuart-Smith R. D., Donovan, M. K., Keith, S. A., Edgar, G. J., Wicquart, J., Guilhaumon, F., Bigot, L., Job, S., Maréchal, J. P., Wickel J., Wilson S., Karkarey R., Arthur, R., Baird, A., Hoey A. S., Arias-Gonzalez, J. E., Mouillot, D., Adjerooud, M. & Parravicini, V. (2024) Unifying coral reef states through space and time reveals a changing ecosystem. *Global Ecology and Biogeography*. <https://doi.org/10.1111/geb.13926>
15. Pérez-Rosales, G., Rouzé, H., Pichon, M., Bongaerts, P., Bregere, N., **Carlot J.**, UTP Consortium, Parravicini, V. & Hédouin, L. (2024) Differential strategies developed by two light-dependent scleractinian corals to extend their vertical range to mesophotic depths. *Coral Reefs*. <https://doi.org/10.1007/s00338-024-02544-2>
14. Raick, X., Krimou, S., Mery, E., **Carlot, J.**, Carpentier, C., Sowinski, J., Sowinski, L., Minier, L., Roux, N., Maueau, T., Bertucci, F. & Lecchini, D. (2024) Restoring the reef: coral restoration yields rapid impacts on fish assemblages. *Estuarine, Coastal and Shelf Science*. <https://doi.org/10.1016/j.ecss.2024.108734>
13. Teixidó, N., **Carlot, J.**, Alliouane, S., Ballesteros, E., Gambi, M C., Gattuso, J. P., Kroeker, K., Micheli, F., Mirasole, A., De Vittor, C., Parravicini, V. & Villéger, S. (2024) Functional changes across marine habitats due to ocean acidification. *Global Change Biology*. <https://doi.org/10.1111/gcb.17105>
12. Cornwall, C. E., **Carlot, J.**, Branson, O., Courtney, T. A., Harvey, B. P., Perry, C. T., Andersson, A. J., Diaz-Pulido, G., Johnson, M. D., Kennedy, E., Krieger, E. C., Mallela, J., McCoy, S. J., Nugues, M. M., Quinter, E., Ross, C. L., Ryan, E., Saderne, V. & Comeau, S. (2023) Crustose coralline algae can contribute more than corals to coral reef carbonate production. *Communications Earth & Environment*. <https://doi.org/10.1038/s43247-023-00766-w>
11. Jouval, F., Adjerooud, M., Bigot, L., Bureau, S., Chabanet, P., Obura, D., Parravicini, V., Guilhaumon, F., Brandl, S., J., **Carlot, J.** & Penin, L. (2023) Recovery potential of coral reefs in the South-Western Indian Ocean. *Ecological Indicators*. <https://doi.org/10.1016/j.ecolind.2023.109952>
10. **Carlot, J.**, Vousdoukas, M., Karambas, T., Rovere, A., Lenihan, H., S., Kayal, M., Adjerooud, M., Pérez-Rosales, G., Hedouin, L. & Parravicini V. (2023) Coral reef structural complexity loss exposes coastlines to waves. *Scientific Reports*. <https://doi.org/10.1038/s41598-023-28945-x>
9. Pérez-Rosales, G., Hernández-Agreda A., Bongaerts, P., Rouzé, H., Pichon, M., **Carlot, J.**, Torda, G., UTP consortium, Parravicini, V. & Hédouin, L. (2022) Mesophotic depths hide high coral cover communities in French Polynesia. *Science of the Total Environment*. <http://dx.doi.org/10.1016/j.scitotenv.2022.157049>
8. Pérez-Rosales, G., Pichon, M., Rouzé, H., Villeger, S., Torda, G., Bongaerts, P., **Carlot J.**, UTP Consortium, Parravicini, V. & Hédouin, L. (2022) Mesophotic coral ecosystems of French Polynesia are hotspots of alpha and beta generic diversity for scleractinian assemblages. *Diversity and Distributions*. <https://doi.org/10.1111/ddi.13549>
7. **Carlot, J.**, Rouzé, H., Barneche, D., Merciere, A., Espiau, B., Cardini, U., Brandl, S. J., Casey, J. M., Pérez-Rosales, G., Adjerooud, M., Hédouin, L. & Parravicini, V. (2022) Scaling up calcification, respiration, and photosynthesis rates of six prominent coral taxa. *Ecology & Evolution*. <https://doi.org/10.1002/ece3.8613>
6. **Carlot, J.**, Kayal, M., Brandl, S. J., Casey, J. M., Lenihan, H. S., Adjerooud, M., Cardini, U., Merciere, A., Barneche, D., Rovere, A., Hedouin, L. & Parravicini, V. (2021) Juvenile corals underpin coral reef carbonate production after disturbance. *Global Change Biology*. <https://doi.org/10.1111/gcb.15610>
5. Morat, F., Wicquart, J., Schiettekatte, N., De Sinéty, G., Bienvenu, J., Casey, J., Brandl, S., **Carlot, J.**, Degregori, S., Mercière, A., Fey, P., Galzin, R., Letourneur, Y., Sasal, P., Vii, J. & Parravicini, V. (2020) Individual back-calculated size-at-age based on otoliths from Pacific coral reef fish species. *Scientific data*. <https://doi.org/10.1038/s41597-020-00711-y>

4. Parravicini, V., Casey, J., Schiettekatte, N., Brandl, S., Pozas-Schacre, C., **Carlot, J.**, Edgar, G., Graham, N. A. J., Harmelin-Vivien, M., Kulbicki, M., Strona, G. & Stuart-Smith, R. D. (2020) Delineating reef fish trophic guilds with global gut content data synthesis and phylogeny. *PLOS Biology*. <https://doi.org/10.1101/2020.03.04.977116>
3. **Carlot, J.**, Rovere, A., Casella, E., Harris, D., Grellet-Munoz, C., Chancerelle, Y., Dormy, E., Hedouin, L. & Parravicini, V. (2020) Community composition predicts photogrammetry-based structural complexity on coral reefs. *Coral Reefs*. <https://doi.org/10.1007/s00338-020-01916-8>
2. Bruge, A., Barreau, C., **Carlot, J.**, Collin, H., Moreno, C. & Maison, P. (2018) Monitoring Litter Inputs from the Adour River (Southwest France) to the Marine Environment. *Journal of Marine Science and Engineering*. <https://doi.org/10.3390/jmse6010024>
1. Siu, G., Bacchet, P., Bernardi, G., Brooks, A. J., **Carlot, J.**, Causse, R., Claudet, J., Clua, E., Delrieu-Trottin, E., Espiau, B., Harmelin-Vivien, M., Keith, P., Lecchini, D., Maddi-Moussa, R., Parravicini, V., Planes, S., Ponsonnet, C., Randall, J. E., Sasal, P., Taquet, M., Williams, J. & Galzin, R. (2017) Shore fishes of French Polynesia. *Cybium*. <https://doi.org/10.26028/cybium/2017-413-003>

2) Non-peer-reviewed publications

3. **Carlot, J.** (2025) Restoring coastal resilience: The role of macroalgal forests in oxygen production and pH regulation. *Journal of Phycology* <http://dx.doi.org/10.1111/jpy.70019>
2. Garrabou, J., Ledoux, J-B., Ramirez-Calero, S., Zentner, Y., Figuerola-Ferrando, L., Gómez-Gras, D., Linares, C., Ponti, M., Turicchia, E., Pulido, T., Cerrano, C., Teixidó, N., **Carlot, J.**, Jou, M., Millan, L., Cebrian, E., Galobart, C., Santamaría, J., Sini, M., Gerovasileiou, V., Bensoussan, N. and T-MEDNet network (2024) 24 years tracking mass mortality events and marine heatwaves: when observations overcome the worst scenarios. *CIESM Monographs workshops n°51*. <https://ciesm.org/online/monographs/index.htm>
1. **Carlot, J.**, Rovere, A., Dormy, E., Biaisque, M. & Parravicini, V. (2021) Les derniers gardiens de la côte in *Étonnants récifs*. CNRS Éditions. EAN: 9782271139092.

3) Submitted articles in peer-review process

7. Cardesse, O., **Carlot, J.**, Morais, J., Parravicini, V. & Morais, M. Habitat-scale coral reef roughness over large scales
Journal targeted: *Coral Reefs*
6. Lorena, M-L., **Carlot, J.**, Morais, R., Mouillot, D., Stuart-Smith, R., Graham, E., Adjerooud, M. & Parravicini, V. Toward robust benchmarks for reef fish biomass: dual baselines and uncertainty-aware indices
Journal targeted: *Fish and Fisheries*
5. Astruch, P., Bensoussan, N., André, S., Boudouresque, C.-F., Tomas, F., Teixidó, N., **Carlot, J.**, Belloni, B., Garcia-Escudero, C. A., Akçali, B., Alcoverro, T., Apostolaki, E. T., Badalamenti, F., Boada, J., Boulenger, A., Cabral, M., Casoli, E., Chimienti, G., Estaque, T., Fernández Torquemada, Y., Gerakaris, V., Gobert, S., Grech, D., Kletou, D., Mačić, V., Mañez-Crespo, J., Marco-Méndez, C., Molenaar, H., Moreno, D., Sánchez-Lizaso, J. L., Schohn, T., Terrados, J., Torras Jorda, G., Ventura, D., Zenone, A., Albalat-Oliver, B., Bardinal, V., Barrajón Domenech, A., Belgacem, W., Ben Souissi, J., Bernardeau-Esteller, J., Bianchi, C. N., Castejón, I., Cebrian, E., Charbonnel, E., Cheminée, A., Chéré, E., Chiarore, A., Constantinou, G., Cottalorda, J.-M., Cvitkovic, I., D'Anna, G., Despalatović, M., Dokoza, F., Fernández-Casado, M., Ferrari, B., Ghanem, R., Guillemain, D., Guillén Nieto, J. E., Güresen, A., Hartmann, V., Hernandez, N., Izquierdo Muñoz, A., Jakl, Z., Jamme, S., Karayali, O., Kleitou, P., Kurtović Mrčelić, J., Lazennec, A., Lovat, V., Mancini, I., Mancini, G., Marbà, N., Marengo, M., Michez, N., Mirasole, A., Monnier, B., Morri, C., Navarro-Martinez, P. C., Oprandi, A., Pansini, A., Pergent-Martini, C., Pey, A., Piazzi, L., Procaccini, G., Remón, J. M., Roberty, S., Romero, J., Ruiz, J. M., Sanmarti Boixeda, N., Sant Felix, M., Scannavino, A., Sobrado, F., Stipcich, P., Žuljević, A. & Montefalcone, M. Mass flowering of the seagrass *Posidonia oceanica* after 2022 record-breaking marine heatwaves: a Pan-Mediterranean study
Journal targeted: *Communications Earth & Environment*
4. Adjerooud, M., **Carlot, J.**, Brandl, S., Bigot, L., Bissery, C., Guilhaumon, F., Job, S., Kayal, M., Maréchal, J-P., Monnier, O., Pellerin, F., Penin, L., Wickel, J., Wicquart, J. & Parravicini, V. Coral reef monitoring in French

overseas: status, gaps, and improvements to meet national and European environmental policy objectives
Journal targeted: Environmental and Sustainability Indicators

3. Parravicini, V., McWilliam, M., Schiettekatte, N. M. D., **Carlot, J.**, Morais, R., Barneche, D. R., Karkarey, R., Adjerooud, M., Burkepile, D., Casey, J. M., Dornelas, M., Edgar, G., Exton, D., Graham, N. A. J., Keith, S., Madin, J., Maire, E., Mouillot, D., Mouquet, N., Stuart-Smith, R., Strona, G., Villeger, S., Wilson, S. & Brandl, S. J. The Global Spectrum of Coral Reef Ecosystem Functions in the Anthropocene
Journal targeted: PLOS Biology
2. Karkarey, R., Maire, E., Graham, N. A. J., Parravicini, V., Brandl, S. J., **Carlot, J.**, Adjerooud, M., Arthur, R., Alcoverro, T., Wilson, S. K., Goetze, J., Holmes, T. H., Wickel, J., Exton, D. A., & Keith S. A. Asynchronous population trends stabilize mesopredatory coral reef fish communities in the face of global change.
Journal targeted: Oikos
1. **Carlot, J.**, Comeau, S., Chiarore, A., Mirasole, A., Alliouane, S., Micheli, F., Hurd, C., Gattuso, J-P., Teixidó, N. Unravelling marine benthic functioning trade-offs under ocean acidification.
Journal targeted: Ecology Letters

4) Acknowledged in peer-reviewed articles

3. Pernet, F., Dupont, S., Gattuso, J-P., Metian, M., & Gazeau, F. (2024) Cracking the Myth: Bivalve Farming is not a CO₂ Sink. Reviews in Aquaculture. <https://doi.org/10.1111/raq.12954>
4. Nebot-Colomer, E., Hernandis, S., Mourre, B., Fraile-Nuez, E., Alvarez, A., Deudero, S., Albentosa, M., Vazquez-Luis, M. (2024) No recruits for an ageing population: First signs of probable population extinction in one of the last reservoirs of the Critically Endangered species *Pinna nobilis*. Journal for Nature Conservation. <https://doi.org/10.1016/j.jnc.2024.126600>
2. Schiettekatte, N. M. D., Brandl S. J., Casey J. M., Graham N. A. J., Barneche, D. R., Burkepile, D. E., Allgeier, J. E., Arias-González, J. E., Edgar, G. J., Ferreira, C. E. L., Floeter, S. R., Friedlander, A. M., Green, A. L., Kulbicki, M., Letourneur, Y., Luiz, O. J., Mercière, A., Morat, F., Munsterman, K. S., Rezende, E. L., Rodríguez-Zaragoza, F. A., Stuart-Smith, R. D., Vigliola, L., Villéger, S. & Parravicini, V. (2022) Biological trade-offs underpin coral reef ecosystem functioning. Nature Ecology and Evolution.
<https://doi.org/10.1038/s41559-022-01710-5>
1. Picone, F., Buonocore, E., Claudet, Chemello, J. R., Russo G. F. & Franzes, P. P (2020) Marine protected areas overall success evaluation (MOSE): A novel integrated framework for assessing management performance and social-ecological benefits of MPAs. Ocean & Coastal Management.
<https://doi.org/10.1016/j.ocecoaman.2020.105370>

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