Alejandro Buschmann

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8734933/publications.pdf

Version: 2024-02-01

130 papers 10,473 citations

50170 46 h-index 98 g-index

136 all docs

136 docs citations

136 times ranked

7282 citing authors

#	Article	IF	CITATIONS
1	Farming the Ocean – Seaweeds as a Quick Fix for the Climate?. Reviews in Fisheries Science and Aquaculture, 2023, 31, 285-295.	5.1	31
2	The Synergistic Impacts of Anthropogenic Stressors and COVID-19 on Aquaculture: A Current Global Perspective. Reviews in Fisheries Science and Aquaculture, 2022, 30, 123-135.	5.1	24
3	The aquaculture supply chain in the time of covid-19 pandemic: Vulnerability, resilience, solutions and priorities at the global scale. Environmental Science and Policy, 2022, 127, 98-110.	2.4	25
4	A systematic evidence map of conservation knowledge in Chilean Patagonia. Conservation Science and Practice, 2022, 4, e575.	0.9	4
5	LeiX. G.,2021. Seaweed and Microalgae as Alternative Sources of Protein. Burleigh Dodds Series in Agricultural Sciences, Volume 107. Burleigh Dodds Science Publisher, Sawston, Cambridge, UK, 322 pp Journal of Phycology, 2022, 58, 179-181.	1.0	0
6	First report of the intentionally introduced kelp, Saccharina japonica, in the Pacific coast of southern Chile. Algal Research, 2022, 65, 102750.	2.4	1
7	Predator control of marine communities increases with temperature across 115 degrees of latitude. Science, 2022, 376, 1215-1219.	6.0	36
8	A 20-year retrospective review of global aquaculture. Nature, 2021, 591, 551-563.	13.7	871
9	Solar Radiation as an Isolated Environmental Factor in an Experimental Mesocosm Approach for Studying Photosynthetic Acclimation of Macrocystis pyrifera (Ochrophyta). Frontiers in Plant Science, 2021, 12, 622150.	1.7	3
10	A mesocosm study on bacteriaâ€kelp interactions: Importance of nitrogen availability and kelp genetics. Journal of Phycology, 2021, 57, 1777-1791.	1.0	5
11	Effect of environmental history on the habitat-forming kelp Macrocystis pyrifera responses to ocean acidification and warming: a physiological and molecular approach. Scientific Reports, 2021, 11, 2510.	1.6	20
12	Varying reproductive success under ocean warming and acidification across giant kelp (Macrocystis) Tj ETQq0 0	0 rgBT /Ov	verlock 10 Tf !
13	Better off alone? Compared performance of monoclonal and polyclonal stands of a cultivated red alga growth. Evolutionary Applications, 2020, 13, 905-917.	1.5	3
14	Enhancing yield on Macrocystis pyrifera (Ochrophyta): The effect of gametophytic developmental strategy. Algal Research, 2020, 52, 102124.	2.4	4
15	Physiological stress modulates epiphyte (Rhizoclonium sp.)-basiphyte (Agarophyton chilense) interaction in co-culture under different light regimes. Journal of Applied Phycology, 2020, 32, 3219-3232.	1.5	4
16	Concise reviews of seaweeds of current and future commercial interest. Journal of Applied Phycology, 2020, 32, 1-2.	1.5	9
17	Challenges for Future Salmonid Farming. , 2019, , 313-319.		6
18	Hydrothermal synthesis, characterization and seed germination effects of greenâ€emitting graphene oxideâ€carbon dot composite using brown macroalgal bioâ€oil as precursor. Journal of Chemical Technology and Biotechnology, 2019, 94, 3269-3275.	1.6	15

#	Article	IF	CITATIONS
19	The seaweed resources of Chile over the period 2006–2016: moving from gatherers to cultivators. Botanica Marina, 2019, 62, 237-247.	0.6	12
20	An introduction to farming and biomass utilisation of marine macroalgae. Phycologia, 2019, 58, 443-445.	0.6	24
21	Toward a Coordinated Global Observing System for Seagrasses and Marine Macroalgae. Frontiers in Marine Science, 2019, 6, .	1.2	123
22	Production of Bioethanol From Brown Algae. , 2019, , 69-88.		11
23	Effect of temperature variation in Agarophyton chilensis: contrasting the response of natural and farmed populations. Journal of Applied Phycology, 2019, 31, 2709-2717.	1.5	5
24	Structure of the epiphytic bacterial communities of Macrocystis pyrifera in localities with contrasting nitrogen concentrations and temperature. Algal Research, 2019, 44, 101706.	2.4	26
25	Revisiting the economic profitability of giant kelp Macrocystis pyrifera (Ochrophyta) cultivation in Chile. Aquaculture, 2019, 502, 80-86.	1.7	32
26	Assessment of genetic and phenotypic diversity of the giant kelp, Macrocystis pyrifera, to support breeding programs. Algal Research, 2018, 30, 101-112.	2.4	32
27	Photosynthesis and nitrogen uptake of the giant kelp Macrocystis pyrifera (Ochrophyta) grown close to salmon farms. Marine Environmental Research, 2018, 135, 93-102.	1.1	27
28	Insights into the diversity and metabolic function of bacterial communities in sediments from Chilean salmon aquaculture sites. Annals of Microbiology, 2018, 68, 63-77.	1.1	34
29	Overview of 3Âyear precommercial seafarming of <i>MacrocystisÂpyrifera</i> along the Chilean coast. Reviews in Aquaculture, 2018, 10, 543-559.	4.6	42
30	Unpacking factors influencing antimicrobial use in global aquaculture and their implication for management: a review from a systems perspective. Sustainability Science, 2018, 13, 1105-1120.	2.5	147
31	Resistencia a los antimicrobianos en Chile y el paradigma de Una Salud: manejando los riesgos para la salud pública humana y animal resultante del uso de antimicrobianos en la acuicultura del salmón y en medicina. Revista Chilena De Infectologia, 2018, 35, 299-308.	0.0	25
32	Nutrients, but not genetic diversity, affect <i>Gracilaria chilensis</i> (Rhodophyta) farming productivity and physiological responses. Journal of Phycology, 2018, 54, 860-869.	1.0	11
33	Plasmid-Mediated Quinolone Resistance (PMQR) Genes and Class 1 Integrons in Quinolone-Resistant Marine Bacteria and Clinical Isolates of Escherichia coli from an Aquacultural Area. Microbial Ecology, 2018, 75, 104-112.	1.4	47
34	The Role Of Seaweeds For Sustainable Aquaculture Development. , 2018, , .		0
35	Macromolecular Antioxidants and Dietary Fiber in Edible Seaweeds. Journal of Food Science, 2017, 82, 289-295.	1.5	46
36	Seaweed production: overview of the global state of exploitation, farming and emerging research activity. European Journal of Phycology, 2017, 52, 391-406.	0.9	453

3

#	Article	IF	CITATIONS
37	Influence of sedimentation in the absence of macrograzers on recruitment of an annual population of <i>Macrocystis pyrifera</i> in Metri Bay, Chile. Austral Ecology, 2017, 42, 783-789.	0.7	2
38	The 22nd International Seaweed Symposium: Academia meets industry. Journal of Applied Phycology, 2017, 29, 2155-2158.	1.5	2
39	Effects of light, temperature and stocking density on Halopteris scoparia growth. Journal of Applied Phycology, 2017, 29, 405-411.	1.5	13
40	Macrocystis pyrifera aquafarming: Production optimization of rope-seeded juvenile sporophytes. Aquaculture, 2017, 468, 107-114.	1.7	32
41	A Functional Perspective Analysis of Macroalgae and Epiphytic Bacterial Community Interaction. Frontiers in Microbiology, 2017, 8, 2561.	1.5	65
42	Perspectives on domestication research for sustainable seaweed aquaculture. Perspectives in Phycology, 2017, 4, 33-46.	1.9	64
43	Production and economic assessment of giant kelpMacrocystis pyriferacultivation for abalone feed in the south of Chile. Aquaculture Research, 2016, 47, 698-707.	0.9	32
44	Aquaculture as yet another environmental gateway to the development and globalisation of antimicrobial resistance. Lancet Infectious Diseases, The, 2016, 16, e127-e133.	4.6	319
45	Global patterns of kelp forest change over the past half-century. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13785-13790.	3.3	511
46	Scaling up bioethanol production from the farmed brown macroalga <i>Macrocystis pyrifera </i> in Chile. Biofuels, Bioproducts and Biorefining, 2016, 10, 673-685.	1.9	40
47	Germplasm banking of the giant kelp: Our biological insurance in a changing environment. Algal Research, 2016, 13, 134-140.	2.4	43
48	Identification and efficient extraction method of phlorotannins from the brown seaweed Macrocystis pyrifera using an orthogonal experimental design. Algal Research, 2016, 16, 201-208.	2.4	92
49	Antimicrobial resistance genes in marine bacteria and human uropathogenic <scp><i>E</i></scp> <i>Scherichia coli</i> Microbiology Reports, 2015, 7, 803-809.	1.0	96
50	Prospects and challenges for industrial production of seaweed bioactives. Journal of Phycology, 2015, 51, 821-837.	1.0	197
51	Analyzing redox balance in a synthetic yeast platform to improve utilization of brown macroalgae as feedstock. Metabolic Engineering Communications, 2015, 2, 76-84.	1.9	12
52	Coexistence in a subtidal habitat in southern Chile: the effects of giant kelp <i>Macrocystis pyrifera</i> overgrowth on the slipper limpet <i>Crepipatella fecunda</i> . Journal of the Marine Biological Association of the United Kingdom, 2015, 95, 25-33.	0.4	1
53	Bioremediation potential, growth and biomass yield of the green seaweed, <i>UlvaÂlactuca</i> in an integrated marine aquaculture system at the Red Sea coast of Saudi Arabia at different stocking densities and effluent flow rates. Reviews in Aquaculture, 2015, 7, 161-171.	4.6	53
54	Evaluation of repopulation techniques for the giant kelp <i>Macrocystis pyrifera</i> (Laminariales). Botanica Marina, 2014, 57, 123-130.	0.6	12

#	Article	IF	CITATIONS
55	Antimicrobial resistance and antimicrobial resistance genes in marine bacteria from salmon aquaculture and nonâ€aquaculture sites. Environmental Microbiology, 2014, 16, 1310-1320.	1.8	136
56	Ecophysiological plasticity of annual populations of giant kelp (Macrocystis pyrifera) in a seasonally variable coastal environment in the Northern Patagonian Inner Seas of Southern Chile. Journal of Applied Phycology, 2014, 26, 837-847.	1.5	31
57	The Status of Kelp Exploitation and Marine Agronomy, with Emphasis on Macrocystis pyrifera, in Chile. Advances in Botanical Research, 2014, , 161-188.	0.5	58
58	Antimicrobial use in aquaculture reâ€examined: its relevance to antimicrobial resistance and to animal and human health. Environmental Microbiology, 2013, 15, 1917-1942.	1.8	607
59	The ecological importance of Macrocystis pyrifera (Phaeophyta) forests towards a sustainable management and exploitation of Chilean coastal benthic co-management areas. International Journal of Environment and Sustainable Development, 2013, 12, 341.	0.2	13
60	Un análisis crÃtico sobre el uso de macroalgas como base para una acuicultura sustentable. Revista Chilena De Historia Natural, 2013, 86, 251-264.	0.5	17
61	Salmon Aquaculture and Antimicrobial Resistance in the Marine Environment. PLoS ONE, 2012, 7, e42724.	1.1	154
62	Can giant kelp (<i>Macrocystis pyrifera</i>) forests enhance invertebrate recruitment in southern Chile?. Marine Biology Research, 2012, 8, 855-864.	0.3	36
63	Experiments on an integrated aquaculture system (seaweeds and marine fish) on the Red Sea coast of Saudi Arabia: efficiency comparison of two local seaweed species for nutrient biofiltration and production. Reviews in Aquaculture, 2012, 4, 21-31.	4.6	33
64	A pilot-scale study of the vegetative propagation and suspended cultivation of the carrageenophyte alga Gigartina skottsbergii in southern Chile. Journal of Applied Phycology, 2012, 24, 11-20.	1.5	15
65	IMTA with Gracilaria vermiculophylla: Productivity and nutrient removal performance of the seaweed in a land-based pilot scale system. Aquaculture, 2011, 312, 77-87.	1.7	248
66	GRAZING ON GIANT KELP MICROSCOPIC PHASES AND THE RECRUITMENT SUCCESS OF ANNUAL POPULATIONS OF MACROCYSTIS PYRIFERA (LAMINARIALES, PHAEOPHYTA) IN SOUTHERN CHILE1. Journal of Phycology, 2011, 47, 252-258.	1.0	23
67	Nitrogen uptake responses of Gracilaria vermiculophylla (Ohmi) Papenfuss under combined and single addition of nitrate and ammonium. Journal of Experimental Marine Biology and Ecology, 2011, 407, 190-199.	0.7	80
68	Uso inadecuado y excesivo de antibi \tilde{A}^3 ticos: Salud p \tilde{A}^0 blica y salmonicultura en Chile. Revista Medica De Chile, 2011, 139, 107-118.	0.1	29
69	Population dynamics and culture studies of the edible red alga <i>Callophyllis variegata</i> (Kallymeniaceae). Phycological Research, 2010, 58, 108-115.	0.8	10
70	Light acclimation strategies of three commercially important red algal species. Aquaculture, 2010, 299, 140-148.	1.7	30
71	Salmon aquaculture and coastal ecosystem health in Chile: Analysis of regulations, environmental impacts and bioremediation systems. Ocean and Coastal Management, 2009, 52, 243-249.	2.0	164
72	Traditional vs. Integrated Multi-Trophic Aquaculture of Gracilaria chilensis C. J. Bird, J. McLachlan & E. C. Oliveira: Productivity and physiological performance. Aquaculture, 2009, 293, 211-220.	1.7	130

#	Article	IF	CITATIONS
73	Ecological engineering in aquaculture â€" Potential for integrated multi-trophic aquaculture (IMTA) in marine offshore systems. Aquaculture, 2009, 297, 1-9.	1.7	457
74	Opportunities and challenges for the development of an integrated seaweed-based aquaculture activity in Chile: determining the physiological capabilities of Macrocystis and Gracilaria as biofilters. Journal of Applied Phycology, 2008, 20, 571-577.	1.5	98
75	Mariculture Waste Management. , 2008, , 2211-2217.		28
76	Seaweed future cultivation in Chile: perspectives and challenges. International Journal of Environment and Pollution, 2008, 33, 432.	0.2	74
77	Multitrophic Integration for Sustainable Marine Aquaculture. , 2008, , 2463-2475.		84
78	Vegetative propagation of the carrageenophytic red alga Gigartina skottsbergii Setchell et Gardner: Indoor and field experiments. Aquaculture, 2007, 262, 120-128.	1.7	19
79	The Need for a Balanced Ecosystem Approach to Blue Revolution Aquaculture. Environment, 2007, 49, 36-43.	0.8	83
80	Opportunities and challenges for the development of an integrated seaweed-based aquaculture activity in Chile: determining the physiological capabilities of Macrocystis and Gracilaria as biofilters. , 2007, , 121-127.		1
81	A review of the impacts of salmonid farming on marine coastal ecosystems in the southeast Pacific. ICES Journal of Marine Science, 2006, 63, 1338-1345.	1.2	194
82	Farming of the Giant Kelp Macrocystis Pyrifera in Southern Chile for Development of Novel Food Products. Journal of Applied Phycology, 2006, 18, 259-267.	1.5	61
83	Long Term Variability in the Structure of Kelp Communities in Northern Chile and the 1997–98 ENSO. Journal of Applied Phycology, 2006, 18, 505-519.	1.5	69
84	Reproduction strategies of Macrocystis pyrifera (Phaeophyta) in Southern Chile: The importance of population dynamics. Journal of Applied Phycology, 2006, 18, 575-582.	1.5	52
85	Reproduction strategies of Macrocystis pyrifera (Phaeophyta) in Southern Chile: The importance of population dynamics., 2006,, 349-356.		1
86	Farming of the giant kelp Macrocystis pyrifera in southern Chile for development of novel food products., 2006,, 33-41.		3
87	Long term variability in the structure of kelp communities in northern Chile and the 1997–98 ENSO. , 2006, , 279-293.		O
88	PRESENCE OF SPOROPHYLLS IN FLOATING KELP RAFTS OF MACROCYSTIS SPP. (PHAEOPHYCEAE) ALONG THE CHILEAN PACIFIC COAST1 Journal of Phycology, 2005, 41, 913-922.	1.0	107
89	Comparison of Spore Inoculated and Vegetative Propagated Cultivation Methods of Gracilaria chilensis in an Integrated Seaweed and Fish Cage Culture. Aquaculture International, 2005, 13, 409-422.	1.1	51
90	Population biology of the subtidal kelps Macrocystis integrifolia and Lessonia trabeculata (Laminariales, Phaeophyceae) in an upwelling ecosystem of northern Chile: interannual variability and El Niño 1997-1998. Revista Chilena De Historia Natural, 2005, 78, 33.	0.5	61

#	Article	IF	Citations
91	The effect of water movement, temperature and salinity on abundance and reproductive patterns of Macrocystis spp. (Phaeophyta) at different latitudes in Chile. Marine Biology, 2004, 145, 849-862.	0.7	118
92	Integrated aquaculture: rationale, evolution and state of the art emphasizing seaweed biofiltration in modern mariculture. Aquaculture, 2004, 231, 361-391.	1.7	773
93	Experimental indoor cultivation of the carrageenophytic red alga Gigartina skottsbergii. Aquaculture, 2004, 241, 357-370.	1.7	32
94	Variability in per capita oogonia and sporophyte production from giant kelp gametophytes (Macrocystis pyrifera, Phaeophyceae). Revista Chilena De Historia Natural, 2004, 77, .	0.5	20
95	Integrated mariculture: asking the right questions. Aquaculture, 2003, 226, 69-90.	1.7	352
96	Use of the axial dispersion model to describe the O3and O3 /H2O2advanced oxidation of alachlor in water. Journal of Chemical Technology and Biotechnology, 2002, 77, 584-592.	1.6	11
97	Red algal farming in Chile: a review. Aquaculture, 2001, 194, 203-220.	1.7	169
98	INTEGRATING SEAWEEDS INTO MARINE AQUACULTURE SYSTEMS: A KEY TOWARD SUSTAINABILITY. Journal of Phycology, 2001, 37, 975-986.	1.0	583
99	Title is missing!. Journal of Applied Phycology, 2001, 13, 253-265.	1.5	28
100	MINI-SYMPOSIUM ON PHOTOBIOLOGY. Revista Chilena De Historia Natural, 2001, 74, .	0.5	0
101	Title is missing!. Hydrobiologia, 1999, 398/399, 427-434.	1.0	24
102	Title is missing!. Journal of Applied Phycology, 1999, 11, 89-97.	1.5	150
103	Title is missing!. Journal of Applied Phycology, 1999, 11, 315-327.	1.5	22
104	Recent advances in the understanding of the biological basis for Gigartina skottsbergii (Rhodophyta) cultivation in Chile. , 1999, , 427-434.		5
105	Integrated marine cultivation of Gracilaria chilensis (Gracilariales, Rhodophyta) and salmon cages for reduced environmental impact and increased economic output. Aquaculture, 1997, 156, 45-61.	1.7	231
106	Intertidal cultivation of Gracilaria chilensis (Rhodophyta) in southern Chile: long term invertebrate abundance patterns. Aquaculture, 1997, 156, 269-278.	1.7	13
107	INFECTIOUS DISEASES OF MAZZAELLA LAMINARIOIDES (RHODOPHYTA): CHANGES IN INFECTION PREVALENCE AND DISEASE EXPRESSION ASSOCIATED WITH SEASON, LOCALITY, AND WITHIN-SITE LOCATION1. Journal of Phycology, 1997, 33, 344-352.	1.0	18
108	Ceramialean epiphytism in an intertidal Gracilaria chilensis (Rhodophyta) bed in southern Chile. Journal of Applied Phycology, 1997, 9, 129-135.	1.5	21

#	Article	IF	CITATIONS
109	Determinants of disease expression and survival of infected individual fronds in wild populations of Mazzaella laminarioides (Rhodophyta) in central and southern Chile. Marine Ecology - Progress Series, 1997, 154, 269-280.	0.9	26
110	A review of the environmental effects and alternative production strategies of marine aquaculture in Chile. Aquacultural Engineering, 1996, 15, 397-421.	1.4	74
111	Integrated tank cultivation of salmonids and Gracilaria chilensis (Gracilariales, Rhodophyta). Hydrobiologia, 1996, 326-327, 75-82.	1.0	102
112	Agar yield and quality of Gracilaria chilensis (Gigartinales, Rhodophyta) in tank culture using fish effluents. Hydrobiologia, 1996, 326-327, 341-345.	1.0	23
113	Gracilaria-Mytilus interaction on a commercial algal farm in Chile. Hydrobiologia, 1996, 326-327, 355-359.	1.0	10
114	Gracilaria-Mytilus interaction on a commercial algal farm in Chile., 1996,, 355-359.		0
115	Agar yield and quality of Gracilaria chilensis (Gigartinales, Rhodophyta) in tank culture using fish effluents., 1996,, 341-345.		2
116	Integrated tank cultivation of salmonids and Gracilaria chilensis (Gracilariales, Rhodophyta)., 1996,, 75-82.		10
117	Cultivation of Gracilaria on the sea-bottom in southern Chile: a review. Journal of Applied Phycology, 1995, 7, 291-301.	1.5	91
118	Gracilaria chilensis outdoor tank cultivation in Chile: Use of land-based salmon culture effluents. Aquacultural Engineering, 1994, 13, 283-300.	1.4	95
119	Interaction mechanisms between Gracilaria chilensis (Rhodophyta) and epiphytes. Hydrobiologia, 1993, 260-261, 345-351.	1.0	80
120	EFFECT OF ROCKY INTERTIDAL AMPHIPODS ON ALGAL RECRUITMENT: A FIELD STUDY1. Journal of Phycology, 1993, 29, 154-159.	1.0	15
121	Interaction mechanisms between Gracilaria chilensis (Rhodophyta) and epiphytes., 1993,, 345-351.		8
122	Intertidal Gracilaria farming in southern Chile: differences of the algal proveniance. Aquatic Botany, 1992, 42, 327-337.	0.8	27
123	Evaluation of artificial intertidal enclosures for Gracilaria farming in southern Chile. Aquacultural Engineering, 1992, 11, 203-216.	1.4	12
124	Abundance, effects and management of epiphytism in intertidal cultures of Gracilaria (Rhodophyta) in southern Chile. Aquaculture, 1991, 92, 7-19.	1.7	59
125	Amphipod Food Preference and Iridaeaspp. (Rhodophyta) Spore Release and Dispersal. Journal of the Marine Biological Association of the United Kingdom, 1991, 71, 891-897.	0.4	15
126	INTERTIDAL AMPHIPODS AS POTENTIAL DISPERSAL AGENTS OF CARPOSPORES OF IRIDAEA LAMINARIOIDES (GIGARTINALES, RHODOPHYTA)1. Journal of Phycology, 1990, 26, 417-420.	1.0	29

#	Article	IF	CITATIONS
127	The role of herbivory and desiccation on early successional patterns of intertidal macroalgae in southern Chile. Journal of Experimental Marine Biology and Ecology, 1990, 139, 221-230.	0.7	24
128	Intertidal macroalgae as refuge and food for amphipoda in Central Chile. Aquatic Botany, 1990, 36, 237-245.	0.8	80
129	Micrograzers and spore release in Iridaea laminarioides Bory (Rhodophyta: Gigartinales). Journal of Experimental Marine Biology and Ecology, 1987, 108, 171-179.	0.7	49
130	Resúmenes en extenso. Revista Bio Ciencias, 0, 8, .	0.1	1