

# Dagmar B Stengel

## List of Publications by Year in descending order

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93  
papers

4,467  
citations

117453

34  
h-index

114278

63  
g-index

95  
all docs

95  
docs citations

95  
times ranked

6000  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evolution and Diversity of Plant Cell Walls: From Algae to Flowering Plants. <i>Annual Review of Plant Biology</i> , 2011, 62, 567-590.	8.6	613
2	Algal chemodiversity and bioactivity: Sources of natural variability and implications for commercial application. <i>Biotechnology Advances</i> , 2011, 29, 483-501.	6.0	463
3	Prospects and challenges for industrial production of seaweed bioactives. <i>Journal of Phycology</i> , 2015, 51, 821-837.	1.0	197
4	The Anti-Inflammatory Effect of Algae-Derived Lipid Extracts on Lipopolysaccharide (LPS)-Stimulated Human THP-1 Macrophages. <i>Marine Drugs</i> , 2015, 13, 5402-5424.	2.2	140
5	Metal accumulation and toxicity measured by PAMâ€”Chlorophyll fluorescence in seven species of marine macroalgae. <i>Ecotoxicology and Environmental Safety</i> , 2009, 72, 1063-1075.	2.9	138
6	Fatty acid contents and profiles of 16 macroalgae collected from the Irish Coast at two seasons. <i>Journal of Applied Phycology</i> , 2014, 26, 451-463.	1.5	132
7	Profiling Phlorotannins in Brown Macroalgae by Liquid Chromatographyâ€”High Resolution Mass Spectrometry. <i>Phytochemical Analysis</i> , 2012, 23, 547-553.	1.2	103
8	LC-PUFA-Enriched Oil Production by Microalgae: Accumulation of Lipid and Triacylglycerols Containing n-3 LC-PUFA Is Triggered by Nitrogen Limitation and Inorganic Carbon Availability in the Marine Haptophyte <i>Pavlova lutheri</i> . <i>Marine Drugs</i> , 2013, 11, 4246-4266.	2.2	97
9	Impact of temperature on fatty acid composition and nutritional value in eight species of microalgae. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 5279-5297.	1.7	89
10	A new HPLC method for the detection of iodine applied to natural samples of edible seaweeds and commercial seaweed food products. <i>Food Chemistry</i> , 2015, 172, 326-334.	4.2	80
11	Connecting marine productivity to sea-spray via nanoscale biological processes: Phytoplankton Dance or Death Disco?. <i>Scientific Reports</i> , 2015, 5, 14883.	1.6	75
12	Morphology, phylogeny and distribution of distromatic <i>Ulva</i> (Ulvothyxales, Ulvophyceae). <i>Journal of Applied Phycology</i> , 2010, 22, 302-310.	0.6	73
13	Impacts of ambient salinity and copper on brown algae: 2. Interactive effects on phenolic pool and assessment of metal binding capacity of phlorotannin. <i>Aquatic Toxicology</i> , 2011, 104, 1-13.	1.9	73
14	Developing a Sustainable and Circular Bio-Based Economy in EU: By Partnering Across Sectors, Upscaling and Using New Knowledge Faster, and For the Benefit of Climate, Environment & Biodiversity, and People & Business. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 619066.	2.0	71
15	Zinc concentrations in marine macroalgae and a lichen from western Ireland in relation to phylogenetic grouping, habitat and morphology. <i>Marine Pollution Bulletin</i> , 2004, 48, 902-909.	2.3	70
16	Iodine content in bulk biomass of wild-harvested and cultivated edible seaweeds: Inherent variations determine species-specific daily allowable consumption. <i>Food Chemistry</i> , 2018, 254, 333-339.	4.2	70
17	Seasonal variation in the pigment content and photosynthesis of different thallus regions of <i>Ascophyllum nodosum</i> (Fucales, Phaeophyta) in relation to position in the canopy. <i>Phycologia</i> , 1998, 37, 259-268.	0.6	68
18	Seasonal and geographical variations in the biochemical composition of the blue mussel ( <i>Mytilus</i> ). <i>Journal of Applied Phycology</i> , 2010, 22, 68-73.	4.2	68

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19	Towards the biorefinery concept: Interaction of light, temperature and nitrogen for optimizing the co-production of high-value compounds in <i>Porphyridium purpureum</i> . <i>Algal Research</i> , 2015, 10, 152-163.	2.4	67
20	Peptide identification from a <i>Porphyra dioica</i> protein hydrolysate with antioxidant, angiotensin converting enzyme and dipeptidyl peptidase IV inhibitory activities. <i>Food and Function</i> , 2019, 10, 3421-3429.	2.1	64
21	The chemical and antioxidant stability of isolated low molecular weight phlorotannins. <i>Food Chemistry</i> , 2017, 221, 1104-1112.	4.2	59
22	Impacts of ambient salinity and copper on brown algae: 1. Interactive effects on photosynthesis, growth, and copper accumulation. <i>Aquatic Toxicology</i> , 2011, 104, 94-107.	1.9	58
23	Intra-thallus differentiation of fatty acid and pigment profiles in some temperate Fucales and Laminariales. <i>Journal of Phycology</i> , 2015, 51, 25-36.	1.0	57
24	Short-term effects of increasing CO <sub>2</sub> , nitrate and temperature on three Mediterranean macroalgae: biochemical composition. <i>Aquatic Biology</i> , 2014, 22, 177-193.	0.5	53
25	An assessment of the techno-functional and sensory properties of yoghurt fortified with a lipid extract from the microalga <i>Pavlova lutheri</i> . <i>Innovative Food Science and Emerging Technologies</i> , 2016, 37, 237-246.	2.7	50
26	Morphology and in situ growth rates of plants of <i>Ascophyllum nodosum</i> (Phaeophyta) from different shore levels and responses of plants to vertical transplantation. <i>European Journal of Phycology</i> , 1997, 32, 193-202.	0.9	47
27	High proportions of inorganic arsenic in <i>Laminaria digitata</i> but not in <i>Ascophyllum nodosum</i> samples from Ireland. <i>Chemosphere</i> , 2017, 186, 17-23.	4.2	46
28	Marine Algae: a Source of Biomass for Biotechnological Applications. <i>Methods in Molecular Biology</i> , 2015, 1308, 1-37.	0.4	43
29	Effects of an experimental heat wave on fatty acid composition in two Mediterranean seagrass species. <i>Marine Pollution Bulletin</i> , 2018, 134, 27-37.	2.3	43
30	Short-term effects of CO <sub>2</sub> , nutrients and temperature on three marine macroalgae under solar radiation. <i>Aquatic Biology</i> , 2014, 22, 159-176.	0.5	41
31	Quantification of iodine loss in edible Irish seaweeds during processing. <i>Journal of Applied Phycology</i> , 2016, 28, 3527-3533.	1.5	40
32	Ecological and commercial implications of temporal and spatial variability in the composition of pigments and fatty acids in five Irish macroalgae. <i>Marine Biology</i> , 2017, 164, 1.	0.7	40
33	Natural Products From Marine Algae. <i>Methods in Molecular Biology</i> , 2015, , .	0.4	39
34	Temporal and spatial variability of mycosporine-like amino acids and pigments in three edible red seaweeds from western Ireland. <i>Journal of Applied Phycology</i> , 2018, 30, 2573-2586.	1.5	38
35	Tissue Cu, Fe and Mn concentrations in different-aged and different functional thallus regions of three brown algae from western Ireland. <i>Estuarine, Coastal and Shelf Science</i> , 2005, 65, 687-696.	0.9	34
36	Depth-induced adjustment of fatty acid and pigment composition suggests high biochemical plasticity in the tropical seagrass <i>Halophila stipulacea</i> . <i>Marine Ecology - Progress Series</i> , 2019, 608, 105-117.	0.9	34

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37	An assessment of metal contamination along the Irish coast using the seaweed <i>Ascophyllum nodosum</i> (Fucales, Phaeophyceae). <i>Environmental Pollution</i> , 2008, 152, 293-303.	3.7	33
38	Seasonal variation in nitrogenous components and bioactivity of protein hydrolysates from <i>Porphyra dioica</i> . <i>Journal of Applied Phycology</i> , 2017, 29, 2439-2450.	1.5	33
39	Seaweed attachment to bedrock: biophysical evidence for a new geophycology paradigm. <i>Geobiology</i> , 2009, 7, 477-487.	1.1	32
40	Molecular iodine emission rates and photosynthetic performance of different thallus parts of <i>Laminaria digitata</i> (Phaeophyceae) during emersion. <i>Planta</i> , 2011, 233, 737-748.	1.6	32
41	Evaluation of food grade solvents for lipid extraction and impact of storage temperature on fatty acid composition of edible seaweeds <i>Laminaria digitata</i> (Phaeophyceae) and <i>Palmaria palmata</i> (Rhodophyta). <i>Food Chemistry</i> , 2016, 208, 161-168.	4.2	32
42	Variability in growth, development and reproduction of the non-native seaweed <i>Sargassum muticum</i> (Phaeophyceae) on the Irish west coast. <i>Estuarine, Coastal and Shelf Science</i> , 2010, 90, 185-194.	0.9	31
43	Plasticity and remodelling of lipids support acclimation potential in two species of low-intertidal macroalgae, <i>Fucus serratus</i> (Phaeophyceae) and <i>Palmaria palmata</i> (Rhodophyta). <i>Algal Research</i> , 2017, 26, 104-114.	2.4	30
44	Chlorophyll a fluorescence responses of temperate Phaeophyceae under submersion and emersion regimes: a comparison of rapid and steady-state light curves. <i>Photosynthesis Research</i> , 2012, 114, 29-42.	1.6	29
45	Iodine contributes to osmotic acclimatisation in the kelp <i>Laminaria digitata</i> (Phaeophyceae). <i>Planta</i> , 2014, 239, 521-530.	1.6	29
46	UAV-mounted hyperspectral mapping of intertidal macroalgae. <i>Estuarine, Coastal and Shelf Science</i> , 2020, 242, 106789.	0.9	27
47	Interactive effects of light and temperature on pigments and n-3 LC-PUFA-enriched oil accumulation in batch-cultivated <i>Pavlova lutheri</i> using high-bicarbonate supply. <i>Algal Research</i> , 2017, 23, 113-125.	2.4	26
48	Nutraceuticals to promote neuronal plasticity in response to corticosterone-induced stress in human neuroblastoma cells. <i>Nutritional Neuroscience</i> , 2019, 22, 551-568.	1.5	25
49	Filamentous microalgae as an advantageous co-substrate for enhanced methane production and digestate dewaterability in anaerobic co-digestion of pig manure. <i>Waste Management</i> , 2021, 119, 399-407.	3.7	25
50	An assessment of temporal variation in the low molecular weight phlorotannin profiles in four intertidal brown macroalgae. <i>Algal Research</i> , 2019, 41, 101550.	2.4	24
51	Environmental response of an Irish estuary to changing land management practices. <i>Science of the Total Environment</i> , 2015, 521-522, 388-399.	3.9	23
52	Arsenolipids are not uniformly distributed within two brown macroalgal species <i>Saccharina latissima</i> and <i>Alaria esculenta</i> . <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 4973-4985.	1.9	23
53	Diversity of bacteria populations associated with different thallus regions of the brown alga <i>Laminaria digitata</i> . <i>PLoS ONE</i> , 2020, 15, e0242675.	1.1	23
54	A novel method combining species distribution models, remote sensing, and field surveys for detecting and mapping subtidal seagrass meadows. <i>Aquatic Conservation: Marine and Freshwater Ecosystems</i> , 2020, 30, 1098-1110.	0.9	22

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55	Lipids and Fatty Acids in Algae: Extraction, Fractionation into Lipid Classes, and Analysis by Gas Chromatography Coupled with Flame Ionization Detector (GC-FID). <i>Methods in Molecular Biology</i> , 2015, 1308, 173-190.	0.4	21
56	Copper and iron concentrations in <i>Ascophyllum nodosum</i> (Fucales, Phaeophyta) from different sites in Ireland and after culture experiments in relation to thallus age and epiphytism. <i>Journal of Experimental Marine Biology and Ecology</i> , 2000, 246, 145-161.	0.7	20
57	Coastal Iodine Emissions. 1. Release of I <sub>2</sub> by <i>Laminaria digitata</i> in Chamber Experiments. <i>Environmental Science &amp; Technology</i> , 2012, 46, 10413-10421.	4.6	20
58	Effects of Temperature and Prolonged Emersion on Photosynthesis, Carbohydrate Content and Growth of the Brown Intertidal Alga <i>Pelvetia canaliculata</i> . <i>Botanica Marina</i> , 2000, 43, .	0.6	19
59	Molecular iodine (I <sub>2</sub> ) emission from two <i>Laminaria</i> species (Phaeophyceae) and impact of irradiance and temperature on I <sub>2</sub> emission into air and iodide release into seawater from <i>Laminaria digitata</i> . <i>Marine Environmental Research</i> , 2013, 92, 102-109.	1.1	19
60	Continuous monitoring of in vivo chlorophyll a fluorescence in <i>Ulva rigida</i> (Chlorophyta) submitted to different CO <sub>2</sub> , nutrient and temperature regimes. <i>Aquatic Biology</i> , 2014, 22, 195-212.	0.5	19
61	Variability in iodine in temperate seaweeds and iodine accumulation kinetics of <i>Fucus vesiculosus</i> and <i>Laminaria digitata</i> (Phaeophyceae, Ochrophyta). <i>Journal of Phycology</i> , 2018, 54, 114-125.	1.0	19
62	Microbial Population Changes in Decaying <i>Ascophyllum nodosum</i> Result in Macroalgal-Polysaccharide-Degrading Bacteria with Potential Applicability in Enzyme-Assisted Extraction Technologies. <i>Marine Drugs</i> , 2019, 17, 200.	2.2	19
63	Responses of the seagrass <i>Halophila stipulacea</i> to depth and spatial gradients in its native region (Red Tj ETQq1 1 0.784314 rgBT /Ov 0.8 19	0.8	19
64	The seaweeds <i>Fucus vesiculosus</i> and <i>Ascophyllum nodosum</i> are significant contributors to coastal iodine emissions. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 5255-5264.	1.9	18
65	Influence of Hydrological Regime in Determining the Response of Macroalgal Blooms to Nutrient Loading in Two Irish Estuaries. <i>Estuaries and Coasts</i> , 2016, 39, 478-494.	1.0	18
66	A field deployable method for a rapid screening analysis of inorganic arsenic in seaweed. <i>Mikrochimica Acta</i> , 2017, 184, 1701-1709.	2.5	18
67	Temporal stability in lipid classes and fatty acid profiles of three seaweed species from the north-eastern coast of Brazil. <i>Algal Research</i> , 2019, 41, 101572.	2.4	18
68	Seasonal and species-specific response of five brown macroalgae to high atmospheric CO <sub>2</sub> . <i>Marine Ecology - Progress Series</i> , 2013, 493, 91-102.	0.9	18
69	Application of multiplatform, multispectral remote sensors for mapping intertidal macroalgae: A comparative approach. <i>Aquatic Conservation: Marine and Freshwater Ecosystems</i> , 2020, 30, 1595-1612.	0.9	16
70	Short-term effects of increased CO <sub>2</sub> , nitrate and temperature on photosynthetic activity in <i>Ulva rigida</i> (Chlorophyta) estimated by different pulse amplitude modulated fluorimeters and oxygen evolution. <i>Journal of Experimental Botany</i> , 2021, 72, 491-509.	2.4	16
71	on the Irish west coast. <i>European Journal of Phycology</i> , 1999, 34, 213-221.	0.9	15
72	Seagrass fatty acid profiles as a sensitive indicator of climate settings across seasons and latitudes. <i>Marine Environmental Research</i> , 2020, 161, 105075.	1.1	15

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73	Linking changes in nutrient source load to estuarine responses: an Irish perspective. <i>Biology and Environment</i> , 2016, 116B, 295.	0.2	15
74	The use of image processing in assessing conchocelis growth and conchospore production in <i>Porphyra linearis</i> . <i>Phycologia</i> , 2004, 43, 282-287.	0.6	13
75	Coastal Iodine Emissions: Part 2. Chamber Experiments of Particle Formation from <i>Laminaria digitata</i> -Derived and Laboratory-Generated I <sub>2</sub> . <i>Environmental Science &amp; Technology</i> , 2012, 46, 10422-10428.	4.6	13
76	Temporal and depth-associated changes in the structure, morphometry and production of near-pristine <i>Zostera marina</i> meadows in western Ireland. <i>Aquatic Botany</i> , 2019, 155, 5-17.	0.8	13
77	Decoupling Abundance and Biomass of Phytoplankton Communities Under Different Environmental Controls: A New Multi-Metric Index. <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	12
78	Acclimation potential and biochemical response of four temperate macroalgae to light and future seasonal temperature scenarios. <i>Algal Research</i> , 2021, 54, 102190.	2.4	12
79	SEASONAL GROWTH AND PHENOTYPIC VARIATION IN <i>PORPHYRA LINEARIS</i> (RHODOPHYTA) POPULATIONS ON THE WEST COAST OF IRELAND. <i>Journal of Phycology</i> , 2007, 43, 90-100.	1.0	11
80	Seasonal Acclimation Modulates the Impacts of Simulated Warming and Light Reduction on Temperate Seagrass Productivity and Biochemical Composition. <i>Frontiers in Marine Science</i> , 2021, 8, .	1.2	11
81	Contribution of living and degrading kelp to coastal iodine fluxes. <i>Marine Biology</i> , 2015, 162, 1727-1738.	0.7	10
82	Role of thermal photosynthetic plasticity in the dispersal and settlement of two global green tide formers: <i>Ulva pertusa</i> and <i>U. ohnoi</i> . <i>Marine Biology</i> , 2019, 166, 1.	0.7	9
83	Voltammetric characterisation of macroalgae-exuded organic ligands (L) in response to Cu and Zn: a source and stimuli for L. <i>Environmental Chemistry</i> , 2014, 11, 100.	0.7	8
84	Factors influencing the distribution of coastal lichens <i>Hydropunctaria maura</i> and <i>Wahlenbergiella mucosa</i> . <i>Marine Ecology</i> , 2015, 36, 1400-1414.	0.4	8
85	Phycobiliproteins, nitrogenous compounds and fatty acid contents in field-collected and cultured gametophytes of <i>Porphyra dioica</i> , a red sea vegetable. <i>Journal of Applied Phycology</i> , 2019, 31, 3849-3860.	1.5	5
86	Seasonal growth and recruitment of <i>Himantalia elongata</i> (Fucales, Phaeophycota) in different habitats on the Irish west coast. <i>European Journal of Phycology</i> , 1999, 34, 213-221.	0.9	4
87	An ecological baseline for <i>Laminaria hyperborea</i> forests in western Ireland. <i>Limnology and Oceanography</i> , 2021, 66, 3439-3454.	1.6	4
88	Bromoform, mycosporine-like amino acids and phycobiliprotein content and stability in <i>Asparagopsis armata</i> during long-term indoor cultivation. <i>Journal of Applied Phycology</i> , 2022, 34, 1635-1647.	1.5	4
89	Low energy harvesting of hydrophobic microalgae ( <i>Tribonema</i> sp.) by electro-flotation without coagulation. <i>Science of the Total Environment</i> , 2022, 838, 155866.	3.9	4
90	Alternation of nuclear phases and chromosome numbers in <i>Porphyra linearis</i> (Bangiales, Rhodophyta) from western Ireland and Maine, USA. <i>Phycologia</i> , 2005, 44, 61-65.	0.6	3

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91	Can Native Epiphytes affect Establishment Success of the Alien Seaweed <i>Sargassum muticum</i> (Phaeophyceae)? <i>Biology and Environment</i> , 2014, 114B, 41.	0.2	3
92	Morphology and in situ growth rates of plants of <i>Ascophyllum nodosum</i> (Phaeophyta) from different shore levels and responses of plants to vertical transplantation. , 0, .		3
93	Metal complexation by organic ligands (L) in near-pristine estuarine waters: evidence for the identity of L. <i>Environmental Chemistry</i> , 2014, 11, 89.	0.7	2