

# Assaf Vardi

## List of Publications by Year in descending order

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86  
papers

8,981  
citations

66234

42  
h-index

54797

84  
g-index

105  
all docs

105  
docs citations

105  
times ranked

7989  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Genome of the Diatom <i>Thalassiosira Pseudonana</i> : Ecology, Evolution, and Metabolism. <i>Science</i> , 2004, 306, 79-86.	6.0	1,862
2	The <i>Phaeodactylum</i> genome reveals the evolutionary history of diatom genomes. <i>Nature</i> , 2008, 456, 239-244.	13.7	1,458
3	Programmed cell death of the dinoflagellate <i>Peridinium gatunense</i> is mediated by CO <sub>2</sub> limitation and oxidative stress. <i>Current Biology</i> , 1999, 9, 1061-1064.	1.8	270
4	A Stress Surveillance System Based on Calcium and Nitric Oxide in Marine Diatoms. <i>PLoS Biology</i> , 2006, 4, e60.	2.6	248
5	Viral Glycosphingolipids Induce Lytic Infection and Cell Death in Marine Phytoplankton. <i>Science</i> , 2009, 326, 861-865.	6.0	229
6	Identification of the algal dimethyl sulfide-releasing enzyme: A missing link in the marine sulfur cycle. <i>Science</i> , 2015, 348, 1466-1469.	6.0	199
7	Oceanographic and Biogeochemical Insights from Diatom Genomes. <i>Annual Review of Marine Science</i> , 2010, 2, 333-365.	5.1	189
8	Host-virus dynamics and subcellular controls of cell fate in a natural coccolithophore population. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19327-19332.	3.3	189
9	Towards clarification of the biological role of microcystins, a family of cyanobacterial toxins. <i>Environmental Microbiology</i> , 2007, 9, 965-970.	1.8	187
10	Vortical ciliary flows actively enhance mass transport in reef corals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 13391-13396.	3.3	173
11	Inhibition of growth and photosynthesis of the dinoflagellate <i>Peridinium gatunense</i> by <i>Microcystis</i> sp. (cyanobacteria): A novel allelopathic mechanism. <i>Limnology and Oceanography</i> , 2002, 47, 1656-1663.	1.6	169
12	Dinoflagellate-Cyanobacterium Communication May Determine the Composition of Phytoplankton Assemblage in a Mesotrophic Lake. <i>Current Biology</i> , 2002, 12, 1767-1772.	1.8	162
13	Virocell Metabolism: Metabolic Innovations During Host-Virus Interactions in the Ocean. <i>Trends in Microbiology</i> , 2016, 24, 821-832.	3.5	160
14	Mapping the diatom redox-sensitive proteome provides insight into response to nitrogen stress in the marine environment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2740-2745.	3.3	147
15	Insights into the Evolution of Multicellularity from the Sea Lettuce Genome. <i>Current Biology</i> , 2018, 28, 2921-2933.e5.	1.8	134
16	Rewiring Host Lipid Metabolism by Large Viruses Determines the Fate of <i>Emiliania huxleyi</i> , a Bloom-Forming Alga in the Ocean. <i>Plant Cell</i> , 2014, 26, 2689-2707.	3.1	132
17	A Diatom Gene Regulating Nitric-Oxide Signaling and Susceptibility to Diatom-Derived Aldehydes. <i>Current Biology</i> , 2008, 18, 895-899.	1.8	126
18	An ecological and evolutionary context for integrated nitrogen metabolism and related signaling pathways in marine diatoms. <i>Current Opinion in Plant Biology</i> , 2006, 9, 264-273.	3.5	114

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19	Coccolithovirus facilitation of carbon export in the North Atlantic. <i>Nature Microbiology</i> , 2018, 3, 537-547.	5.9	114
20	Potential impact of stress activated retrotransposons on genome evolution in a marine diatom. <i>BMC Genomics</i> , 2009, 10, 624.	1.2	112
21	Decoupling Physical from Biological Processes to Assess the Impact of Viruses on a Mesoscale Algal Bloom. <i>Current Biology</i> , 2014, 24, 2041-2046.	1.8	110
22	Viral infection of the marine alga <i>Emiliana huxleyi</i> triggers lipidome remodeling and induces the production of highly saturated triacylglycerol. <i>New Phytologist</i> , 2016, 210, 88-96.	3.5	98
23	Digital expression profiling of novel diatom transcripts provides insight into their biological functions. <i>Genome Biology</i> , 2010, 11, R85.	13.9	97
24	IDENTIFICATION AND COMPARATIVE GENOMIC ANALYSIS OF SIGNALING AND REGULATORY COMPONENTS IN THE DIATOM THALASSIOSIRA PSEUDONANA. <i>Journal of Phycology</i> , 2007, 43, 585-604.	1.0	87
25	A chemical arms race at sea mediates algal host-virus interactions. <i>Current Opinion in Microbiology</i> , 2011, 14, 449-457.	2.3	84
26	Infection of phytoplankton by aerosolized marine viruses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6643-6647.	3.3	79
27	Elucidating the composition and conservation of the autophagy pathway in photosynthetic eukaryotes. <i>Autophagy</i> , 2015, 11, 701-715.	4.3	79
28	A coral-on-a-chip microfluidic platform enabling live-imaging microscopy of reef-building corals. <i>Nature Communications</i> , 2016, 7, 10860.	5.8	79
29	Modulation of host ROS metabolism is essential for viral infection of a bloom-forming coccolithophore in the ocean. <i>ISME Journal</i> , 2016, 10, 1742-1754.	4.4	79
30	Phosphorus starvation induces membrane remodeling and recycling in <i>Emiliana huxleyi</i> . <i>New Phytologist</i> , 2016, 211, 886-898.	3.5	78
31	Bacterial virulence against an oceanic bloom-forming phytoplankter is mediated by algal DMSP. <i>Science Advances</i> , 2018, 4, eaau5716.	4.7	78
32	Hijacking of an autophagy-like process is critical for the life cycle of a DNA virus infecting oceanic algal blooms. <i>New Phytologist</i> , 2014, 204, 854-863.	3.5	71
33	Microbial metabolites in the marine carbon cycle. <i>Nature Microbiology</i> , 2022, 7, 508-523.	5.9	71
34	Novel molecular determinants of viral susceptibility and resistance in the lipidome of <i>Emiliana huxleyi</i> . <i>Environmental Microbiology</i> , 2014, 16, 1137-1149.	1.8	68
35	Synchronization of cell death in a dinoflagellate population is mediated by an excreted thiol protease. <i>Environmental Microbiology</i> , 2007, 9, 360-369.	1.8	64
36	Apoptosis-Inducing Galactolipids from a Cultured Marine Diatom, <i>Phaeodactylum tricorutum</i> . <i>Journal of Natural Products</i> , 2008, 71, 1197-1201.	1.5	60

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37	Early perturbation in mitochondria redox homeostasis in response to environmental stress predicts cell fate in diatoms. <i>ISME Journal</i> , 2015, 9, 385-395.	4.4	59
38	Viral serine palmitoyltransferase induces metabolic switch in sphingolipid biosynthesis and is required for infection of a marine alga. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E1907-16.	3.3	58
39	Communication via extracellular vesicles enhances viral infection of a cosmopolitan alga. <i>Nature Microbiology</i> , 2017, 2, 1485-1492.	5.9	56
40	A single-cell view on alga-virus interactions reveals sequential transcriptional programs and infection states. <i>Science Advances</i> , 2020, 6, eaba4137.	4.7	55
41	Extracellular vesicles – new players in cell-cell communication in aquatic environments. <i>Current Opinion in Microbiology</i> , 2018, 43, 148-154.	2.3	54
42	Effects of phytoplankton physiology on export flux. <i>Marine Ecology - Progress Series</i> , 2008, 354, 3-19.	0.9	54
43	Expression profiling of host and virus during a coccolithophore bloom provides insights into the role of viral infection in promoting carbon export. <i>ISME Journal</i> , 2018, 12, 704-713.	4.4	53
44	In plaque-mass spectrometry imaging of a bloom-forming alga during viral infection reveals a metabolic shift towards odd-chain fatty acid lipids. <i>Nature Microbiology</i> , 2019, 4, 527-538.	5.9	52
45	DddD Is a CoA-Transferase/Lyase Producing Dimethyl Sulfide in the Marine Environment. <i>Biochemistry</i> , 2014, 53, 5473-5475.	1.2	51
46	Visualizing active viral infection reveals diverse cell fates in synchronized algal bloom demise. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	51
47	Zooplankton May Serve as Transmission Vectors for Viruses Infecting Algal Blooms in the Ocean. <i>Current Biology</i> , 2014, 24, 2592-2597.	1.8	48
48	Expanding Tara Oceans Protocols for Underway, Ecosystemic Sampling of the Ocean-Atmosphere Interface During Tara Pacific Expedition (2016-2018). <i>Frontiers in Marine Science</i> , 2019, 6, .	1.2	42
49	Cell signaling in marine diatoms. <i>Communicative and Integrative Biology</i> , 2008, 1, 134-136.	0.6	40
50	Targeted and untargeted lipidomics of <i>Emiliana huxleyi</i> viral infection and life cycle phases highlights molecular biomarkers of infection, susceptibility, and ploidy. <i>Frontiers in Marine Science</i> , 2015, 2, .	1.2	37
51	Dimethyl sulfide mediates microbial predator-prey interactions between zooplankton and algae in the ocean. <i>Nature Microbiology</i> , 2021, 6, 1357-1366.	5.9	33
52	Viral infection of algal blooms leaves a unique metabolic footprint on the dissolved organic matter in the ocean. <i>Science Advances</i> , 2021, 7, .	4.7	32
53	Improving transcriptome construction in non-model organisms: integrating manual and automated gene definition in <i>Emiliana huxleyi</i> . <i>BMC Genomics</i> , 2014, 15, 148.	1.2	31
54	<i>N</i> -Acyl Homoserine Lactone Derived Tetramic Acids Impair Photosynthesis in <i>Phaeodactylum tricornutum</i> . <i>ACS Chemical Biology</i> , 2019, 14, 198-203.	1.6	29

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55	Morphological switch to a resistant subpopulation in response to viral infection in the bloom-forming coccolithophore <i>Emiliania huxleyi</i> . <i>PLoS Pathogens</i> , 2017, 13, e1006775.	2.1	29
56	Dispersion/dilution enhances phytoplankton blooms in low-nutrient waters. <i>Nature Communications</i> , 2017, 8, 14868.	5.8	28
57	<i>Vibrio coralliilyticus</i> infection triggers a behavioural response and perturbs nutritional exchange and tissue integrity in a symbiotic coral. <i>ISME Journal</i> , 2019, 13, 989-1003.	4.4	27
58	Chronic iron limitation confers transient resistance to oxidative stress in marine diatoms. <i>Plant Physiology</i> , 2016, 172, pp.00840.2016.	2.3	26
59	Expansion of the redox-sensitive proteome coincides with the plastid endosymbiosis. <i>Nature Plants</i> , 2017, 3, 17066.	4.7	26
60	Diatom genomes come of age. <i>Genome Biology</i> , 2008, 9, 245.	13.9	25
61	Biotic interactions as drivers of algal origin and evolution. <i>New Phytologist</i> , 2017, 216, 670-681.	3.5	25
62	Using NanoSIMS coupled with microfluidics to visualize the early stages of coral infection by <i>Vibrio coralliilyticus</i> . <i>BMC Microbiology</i> , 2018, 18, 39.	1.3	20
63	Light-dependent single-cell heterogeneity in the chloroplast redox state regulates cell fate in a marine diatom. <i>ELife</i> , 2019, 8, .	2.8	20
64	Unmasking cellular response of a bloom-forming alga to viral infection by resolving expression profiles at a single-cell level. <i>PLoS Pathogens</i> , 2019, 15, e1007708.	2.1	19
65	Ambiguous evidence for assigning DddQ as a dimethylsulfoniopropionate lyase and oceanic dimethylsulfide producer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E2078-9.	3.3	17
66	Ecological significance of extracellular vesicles in modulating host-virus interactions during algal blooms. <i>ISME Journal</i> , 2021, 15, 3714-3721.	4.4	17
67	Diurnal fluctuations in chloroplast GSH redox state regulate susceptibility to oxidative stress and cell fate in a bloom-forming diatom. <i>Journal of Phycology</i> , 2018, 54, 329-341.	1.0	16
68	Assigning the Algal Source of Dimethylsulfide Using a Selective Lyase Inhibitor. <i>ACS Chemical Biology</i> , 2017, 12, 41-46.	1.6	15
69	Infection Dynamics of a Bloom-Forming Alga and Its Virus Determine Airborne Coccolith Emission from Seawater. <i>IScience</i> , 2018, 6, 327-335.	1.9	14
70	Decoupling atmospheric and oceanic factors affecting aerosol loading over a cluster of mesoscale North Atlantic eddies. <i>Geophysical Research Letters</i> , 2014, 41, 4075-4081.	1.5	13
71	Biochemical Characterization of a Novel Redox-Regulated Metacaspase in a Marine Diatom. <i>Frontiers in Microbiology</i> , 2021, 12, 688199.	1.5	13
72	Terrestrial and marine influence on atmospheric bacterial diversity over the north Atlantic and Pacific Oceans. <i>Communications Earth &amp; Environment</i> , 2022, 3, .	2.6	13

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73	Nitric oxide mediates oxylipin production and grazing defense in diatoms. <i>Environmental Microbiology</i> , 2020, 22, 629-645.	1.8	12
74	Microscale tracking of coral-vibrio interactions. <i>ISME Communications</i> , 2021, 1, .	1.7	12
75	Bistability in oxidative stress response determines the migration behavior of phytoplankton in turbulence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	10
76	Tara Pacific Expeditionâ€™s Atmospheric Measurements of Marine Aerosols across the Atlantic and Pacific Oceans: Overview and Preliminary Results. <i>Bulletin of the American Meteorological Society</i> , 2020, 101, E536-E554.	1.7	9
77	Algal viruses hitchhiking on zooplankton across phytoplankton blooms. <i>Communicative and Integrative Biology</i> , 2015, 8, e1029210.	0.6	7
78	An <i>Emiliana huxleyi</i> pan-transcriptome reveals basal strain specificity in gene expression patterns. <i>Scientific Reports</i> , 2021, 11, 20795.	1.6	7
79	Complete Genome Sequence of <i>Emiliana huxleyi</i> Virus Strain M1, Isolated from an Induced <i>E. huxleyi</i> Bloom in Bergen, Norway. <i>Microbiology Resource Announcements</i> , 2022, 11, e0007122.	0.3	6
80	Complete Genome Sequence of <i>Sulfitobacter</i> sp. Strain D7, a Virulent Bacterium Isolated from an <i>Emiliana huxleyi</i> Algal Bloom in the North Atlantic. <i>Microbiology Resource Announcements</i> , 2018, 7, .	0.3	5
81	Magnesium-Rich Nanometric Layer in the Skeleton of <i>Pocillopora damicornis</i> With Possible Involvement in Fibrous Aragonite Deposition. <i>Frontiers in Marine Science</i> , 2018, 5, .	1.2	5
82	Diel cycle of sea spray aerosol concentration. <i>Nature Communications</i> , 2021, 12, 5476.	5.8	5
83	An Ocean of Signals: Intracellular and Extracellular Signaling in Diatoms. , 2022, , 641-678.		3
84	Pharmacokinetics of Endobronchial Tolazoline Administration in Dogs. <i>American Journal of Perinatology</i> , 1999, 16, 1-6.	0.6	2
85	Correction: Diatom genomes come of age. <i>Genome Biology</i> , 2010, 11, 401.	13.9	0
86	Infection Dynamics of a Bloom-Forming Alga and Its Virus Determine Airborne Coccolith Emission from Seawater. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0