# Koen Sabbe

List of Publications by Year
in descending order

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|---|---|---|---|
| 92 papers | 4,433 citations | 94433 37 h-index | 123424 61 g-index |
| 96 all docs | 96 docs citations | 96 times ranked | 4226 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Experimental Studies on Sexual Reproduction in Diatoms. International Review of Cytology, 2004, 237, 91-154. | 6.2 | 248 |
| 2 | Limits to gene flow in a cosmopolitan marine planktonic diatom. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12952-12957. | 7.1 | 206 |
| 3 | Benthic diatom flora of freshwater and saline lakes in the Larsemann Hills and Rauer Islands, East Antarctica. Antarctic Science, 2003, 15, 227-248. | 0.9 | 171 |
| 4 | Beach nourishment: an ecologically sound coastal defence alternative? A review. Aquatic Conservation: Marine and Freshwater Ecosystems, 2006, 16, 419-435. | 2.0 | 169 |
| 5 | Morphological, genetic and mating diversity within the widespread bioindicatorNitzschia palea(Bacillariophyceae). Phycologia, 2009, 48, 443-459. | 1.4 | 129 |
| 6 | Metabolomics Enables the Structure Elucidation of a Diatom Sex Pheromone. Angewandte Chemie - International Edition, 2013, 52, 854-857. | 13.8 | 122 |
| 7 | EFFECTS OF DEPTH, SALINITY, AND SUBSTRATE ON THE INVERTEBRATE COMMUNITY OF A FLUCTUATING TROPICAL LAKE. Ecology, 2000, 81, 164-182. | 3.2 | 106 |
| 8 | Salinity, depth and the structure and composition of microbial mats in continental Antarctic lakes. Freshwater Biology, 2004, 49, 296-319. | 2.4 | 104 |
| 9 | Tolerance of benthic diatoms from temperate aquatic and terrestrial habitats to experimental desiccation and temperature stress. Phycologia, 2010, 49, 309-324. | 1.4 | 100 |
| 10 | Late Quaternary climate-driven environmental change in the Larsemann Hills, East Antarctica, multi-proxy evidence from a lake sediment core. Quaternary Research, 2005, 64, 83-99. | 1.7 | 99 |
| 11 | Growth form defines physiological photoprotective capacity in intertidal benthic diatoms. ISME Journal, 2015, 9, 32-45. | 9.8 | 98 |
| 12 | SEXUAL REPRODUCTION, MATING SYSTEM, AND PROTOPLAST DYNAMICS OF SEMINAVIS (BACILLARIOPHYCEAE)1. Journal of Phycology, 2002, 38, 1004-1019. | 2.3 | 93 |
| 13 | Molecular Evidence for Distinct Antarctic Lineages in the Cosmopolitan Terrestrial Diatoms Pinnularia borealis and Hantzschia amphioxys. Protist, 2013, 164, 101-115. | 1.5 | 83 |
| 14 | ECOLOGICAL DIFFERENTIATION BETWEEN SYMPATRIC PSEUDOCRYPTIC SPECIES IN THE ESTUARINE BENTHIC DIATOMNAVICULA PHYLLEPTA(BACILLARIOPHYCEAE)<sup>1</sup>. Journal of Phycology, 2009, 45, 1278-1289. | 2.3 | 82 |
| 15 | Complementarity effects drive positive diversity effects on biomass production in experimental benthic diatom biofilms. Journal of Ecology, 2009, 97, 1075-1082. | 4.0 | 77 |
| 16 | A sex-inducing pheromone triggers cell cycle arrest and mate attraction in the diatom Seminavis robusta. Scientific Reports, 2016, 6, 19252. | 3.3 | 76 |
| 17 | Six newActinella(Bacillariophyta) species from Papua New Guinea, Australia and New Zealand: further evidence for widespread diatom endemism in the Australasian region. European Journal of Phycology, 2001, 36, 321-340. | 2.0 | 75 |
| 18 | Eunophora gen. nov. (Bacillariophyta) from Tasmania and New Zealand: description and comparison with Eunotia and amphoroid diatoms. European Journal of Phycology, 1998, 33, 95-111. | 2.0 | 73 |

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|---|---|---|---|
| 19 | Sexual reproduction, mating system, chloroplast dynamics and abrupt cell size reduction inPseudo-nitzschia pungensfrom the North Sea (Bacillariophyta). European Journal of Phycology, 2005, 40, 379-395. | 2.0 | 71 |
| 20 | Tolerance of resting cells of freshwater and terrestrial benthic diatoms to experimental desiccation and freezing is habitat-dependent. Phycologia, 2013, 52, 246-255. | 1.4 | 71 |
| 21 | Title is missing!. Journal of Paleolimnology, 2003, 30, 195-215. | 1.6 | 67 |
| 22 | Late Quaternary deglaciation and climate history of the Larsemann Hills(East Antarctica). Journal of Quaternary Science, 2004, 19, 361-375. | 2.1 | 67 |
| 23 | Relative sea-level history from the Lambert Glacier region, East Antarctica, and its relation to deglaciation and Holocene glacier readvance. Quaternary Research, 2005, 63, 45-52. | 1.7 | 67 |
| 24 | Physiological and Transcriptomic Evidence for a Close Coupling between Chloroplast Ontogeny and Cell Cycle Progression in the Pennate DiatomSeminavis robustaÂ Â Â Â. Plant Physiology, 2008, 148, 1394-1411. | 4.8 | 65 |
| 25 | Biodiversity increases functional and compositional resistance, but decreases resilience in phytoplankton communities. Ecology, 2016, 97, 3433-3440. | 3.2 | 63 |
| 26 | THE SYSTEMATICS OF A SMALL SPINELESSDESMODESMUSSPECIES,D. COSTATO-GRANULATUS(SPHAEROPLEALES, CHLOROPHYCEAE), BASED ON ITS2 rDNA SEQUENCE ANALYSES AND CELL WALL MORPHOLOGY. Journal of Phycology, 2007, 43, 378-396. | 2.3 | 62 |
| 27 | Diatom-Bacteria Interactions Modulate the Composition and Productivity of Benthic Diatom Biofilms. Frontiers in Microbiology, 2019, 10, 1255. | 3.5 | 59 |
| 28 | The Seminavis robusta genome provides insights into the evolutionary adaptations of benthic diatoms. Nature Communications, 2020, 11, 3320. | 12.8 | 55 |
| 29 | Per capita interactions and stress tolerance drive stress-induced changes in biodiversity effects on ecosystem functions. Nature Communications, 2016, 7, 12486. | 12.8 | 54 |
| 30 | Synergistic Interactions within a Multispecies Biofilm Enhance Individual Species Protection against Grazing by a Pelagic Protozoan. Frontiers in Microbiology, 2017, 8, 2649. | 3.5 | 52 |
| 31 | The Link between Microbial Diversity and Nitrogen Cycling in Marine Sediments Is Modulated by Macrofaunal Bioturbation. PLoS ONE, 2015, 10, e0130116. | 2.5 | 50 |
| 32 | Groundâ€truthing Late Ordovician climate models using the paleobiogeography of graptolites. Paleoceanography, 2009, 24, . | 3.0 | 47 |
| 33 | A time-calibrated multi-gene phylogeny of the diatom genus Pinnularia. Molecular Phylogenetics and Evolution, 2011, 61, 866-879. | 2.7 | 45 |
| 34 | USING QUANTITATIVE PCR TO DETERMINE THE DISTRIBUTION OF A SEMICRYPTIC BENTHIC DIATOM, NAVICULA PHYLLEPTA (BACILLARIOPHYCEAE). Journal of Phycology, 2006, 42, 1142-1154. | 2.3 | 43 |
| 35 | Global radiation in a rare biosphere soil diatom. Nature Communications, 2020, 11, 2382. | 12.8 | 43 |
| 36 | A Doubling of Microphytobenthos Biomass Coincides with a Tenfold Increase in Denitrifier and Total Bacterial Abundances in Intertidal Sediments of a Temperate Estuary. PLoS ONE, 2015, 10, e0126583. | 2.5 | 43 |

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|---|---|---|---|
| 37 | Revision of the genusNaviculas.s. (Bacillariophyceae) in inland waters of the Sub-Antarctic and Antarctic with the description of five new species. Phycologia, 2011, 50, 281-297. | 1.4 | 41 |
| 38 | Diatom feeding across trophic guilds in tidal flat nematodes, and the importance of diatom cell size. Journal of Sea Research, 2014, 92, 125-133. | 1.6 | 41 |
| 39 | Diatoms define a novel freshwater biogeography of the Antarctic. Ecography, 2021, 44, 548-560. | 4.5 | 41 |
| 40 | Protozoan Cysts Act as a Survival Niche and Protective Shelter for Foodborne Pathogenic Bacteria. Applied and Environmental Microbiology, 2015, 81, 5604-5612. | 3.1 | 40 |
| 41 | Evidence for constant and highly specific active food selection by benthic ciliates in mixed diatoms assemblages. Limnology and Oceanography, 2004, 49, 58-68. | 3.1 | 39 |
| 42 | Taxonomy, morphology and ecology of some widespread representatives of the diatom genusOpephora. European Journal of Phycology, 1995, 30, 235-249. | 2.0 | 38 |
| 43 | Changes in chlorophyll concentration and phenology in the North Sea in relation to deâ€eutrophication and sea surface warming. Limnology and Oceanography, 2020, 65, 828-847. | 3.1 | 38 |
| 44 | Lack of population genetic structuring in the marine planktonic diatom Pseudo-nitzschia pungens (Bacillariophyceae) in a heterogeneous area in the Southern Bight of the North Sea. Marine Biology, 2009, 156, 1149-1158. | 1.5 | 36 |
| 45 | FOUR NEW NON-MARINE DIATOM TAXA FROM THE SUBANTARCTIC AND ANTARCTIC REGIONS. Diatom Research, 2010, 25, 431-443. | 1.2 | 35 |
| 46 | Apomixis inAchnanthes(Bacillariophyceae); development of a model system for diatom reproductive biology. European Journal of Phycology, 2004, 39, 327-341. | 2.0 | 34 |
| 47 | Host specificity in diatomâ€“bacteria interactions alleviates antagonistic effects. FEMS Microbiology Ecology, 2019, 95, . | 2.7 | 33 |
| 48 | Contrasting NPQ dynamics and xanthophyll cycling in a motile and a nonâ€motile intertidal benthic diatom. Limnology and Oceanography, 2017, 62, 1466-1479. | 3.1 | 32 |
| 49 | Tolerance of pennate diatoms (Bacillariophyceae) to experimental freezing: comparison of polar and temperate strains. Phycologia, 2019, 58, 382-392. | 1.4 | 32 |
| 50 | Late Holocene changes in ultraviolet radiation penetration recorded in an East Antarctic lake. Journal of Paleolimnology, 2005, 34, 191-202. | 1.6 | 31 |
| 51 | Nematodes stimulate biomass accumulation in a multispecies diatom biofilm. Marine Environmental Research, 2018, 140, 78-89. | 2.5 | 31 |
| 52 | OOGAMOUS REPRODUCTION, WITH TWO-STEP AUXOSPORULATION, IN THE CENTRIC DIATOMTHALASSIOSIRA PUNCTIGERA(BACILLARIOPHYTA). Journal of Phycology, 2006, 42, 845-858. | 2.3 | 30 |
| 53 | Bacterial and eukaryotic biodiversity patterns in terrestrial and aquatic habitats in the SÃ¸r Rondane Mountains, Dronning Maud Land, East Antarctica. FEMS Microbiology Ecology, 2016, 92, fiw041. | 2.7 | 30 |
| 54 | Behavioural versus physiological photoprotection in epipelic and epipsammic benthic diatoms. European Journal of Phycology, 2018, 53, 146-155. | 2.0 | 30 |

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|---|---|---|---|
| 55 | N-Acyl Homoserine Lactone Derived Tetramic Acids Impair Photosynthesis in Phaeodactylum tricornutum. ACS Chemical Biology, 2019, 14, 198-203. | 3.4 | 29 |
| 56 | Mitotic recombination between homologous chromosomes drives genomic diversity in diatoms. Current Biology, 2021, 31, 3221-3232.e9. | 3.9 | 29 |
| 57 | Dynamics and trophic roles of heterotrophic protists in the plankton of a freshwater tidal estuary. Hydrobiologia, 2000, 432, 25-36. | 2.0 | 28 |
| 58 | The Belgian sandy beach ecosystem: a review. Marine Ecology, 2008, 29, 171-185. | 1.1 | 28 |
| 59 | Heterothallic sexual reproduction in the model diatom Cylindrotheca. European Journal of Phycology, 2013, 48, 93-105. | 2.0 | 28 |
| 60 | Late Quaternary climatic changes in southern Chile, as recorded in a diatom sequence of Lago Puyehue (40Â°40â€²ÂS). Journal of Paleolimnology, 2008, 39, 219-235. | 1.6 | 27 |
| 61 | Interactions between Benthic Copepods, Bacteria and Diatoms Promote Nitrogen Retention in Intertidal Marine Sediments. PLoS ONE, 2014, 9, e111001. | 2.5 | 27 |
| 62 | New species ofFragilariforma(Bacillariophyceae) from New Zealand and Australia. New Zealand Journal of Botany, 2003, 41, 535-554. | 1.1 | 25 |
| 63 | Marked changes in diatom and dinoflagellate biomass, composition and seasonality in the Belgian Part of the North Sea between the 1970s and 2000s. Science of the Total Environment, 2020, 716, 136316. | 8.0 | 25 |
| 64 | Five new freshwater species of Biremis (Bacillariophyta) from Tasmania. Phycologia, 1997, 36, 91-102. | 1.4 | 24 |
| 65 | New Gomphonema (Bacillariophyta) species from Tasmania. Phycologia, 2004, 43, 427-444. | 1.4 | 24 |
| 66 | Expanding the toolbox for cryopreservation of marine and freshwater diatoms. Scientific Reports, 2018, 8, 4279. | 3.3 | 24 |
| 67 | Leeuwenhoekiella aestuarii sp. nov., isolated from salt-water sediment and first insights in the genomes of Leeuwenhoekiella species. International Journal of Systematic and Evolutionary Microbiology, 2020, 70, 1706-1719. | 1.7 | 24 |
| 68 | Stressorâ€induced biodiversity gradients: revisiting biodiversityâ€“ecosystem functioning relationships. Oikos, 2015, 124, 677-684. | 2.7 | 22 |
| 69 | Thermal Niche Differentiation in the Benthic Diatom Cylindrotheca closterium (Bacillariophyceae) Complex. Frontiers in Microbiology, 2019, 10, 1395. | 3.5 | 21 |
| 70 | Quantifying habitatâ€specific diatom production: A critical assessment using morphological and biogeochemical markers in Antarctic marine and lake sediments. Limnology and Oceanography, 2004, 49, 1528-1539. | 3.1 | 20 |
| 71 | Extending Landsat 8: Retrieval of an Orange contra-Band for Inland Water Quality Applications. Remote Sensing, 2020, 12, 637. | 4.0 | 20 |
| 72 | Temporal dynamics in a shallow coastal benthic food web: Insights from fatty acid biomarkers and their stable isotopes. Marine Environmental Research, 2015, 108, 55-68. | 2.5 | 19 |

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|---|---|---|---|
| 73 | Indications of Dynamic Effects on Scaling Relationships Between Channel Sinuosity and Vegetation Patch Size Across a Salt Marsh Platform. Journal of Geophysical Research F: Earth Surface, 2018, 123, 2714-2731. | 2.8 | 19 |
| 74 | Incomplete Reproductive Isolation Between Genetically Distinct Sympatric Clades of the Pennate Model Diatom Seminavis robusta. Protist, 2018, 169, 569-583. | 1.5 | 19 |
| 75 | New and little-known Fallacia species (Bacillariophyta) from brackish and marine intertidal sandy sediments in Northwest Europe and North America. Phycologia, 1999, 38, 8-22. | 1.4 | 18 |
| 76 | Absence of a Medieval Climate Anomaly, Little Ice Age and twentieth century warming in Skarvsnes, LÃ¼tzow Holm Bay, East Antarctica. Antarctic Science, 2014, 26, 585-598. | 0.9 | 18 |
| 77 | Mating type specific transcriptomic response to sex inducing pheromone in the pennate diatom Seminavis robusta. ISME Journal, 2021, 15, 562-576. | 9.8 | 17 |
| 78 | Different responseâ€“effect trait relationships underlie contrasting responses to two chemical stressors. Journal of Ecology, 2017, 105, 1598-1609. | 4.0 | 15 |
| 79 | Uncertainty in global downwelling plane irradiance estimates from sintered polytetrafluoroethylene plaque radiance measurements. Applied Optics, 2019, 58, 4497. | 1.8 | 13 |
| 80 | Seasonal changes in the biochemical fate of carbon fixed by benthic diatoms in intertidal sediments. Limnology and Oceanography, 2018, 63, 550-569. | 3.1 | 11 |
| 81 | Selection constrains lottery assembly in the microbiomes of closely related diatom species. ISME Communications, 2022, 2, . | 4.2 | 11 |
| 82 | Transmission electron microscopy sample preparation protocols for the ultrastructural study of cysts of free-living protozoa. BioTechniques, 2015, 58, 181-188. | 1.8 | 10 |
| 83 | Extinction of austral diatoms in response to large-scale climate dynamics in Antarctica. Science Advances, 2021, 7, eabh3233. | 10.3 | 10 |
| 84 | Optical and biogeochemical properties of diverse Belgian inland and coastal waters. Earth System Science Data, 2022, 14, 2697-2719. | 9.9 | 10 |
| 85 | Marine phytoplankton community composition data from the Belgian part of the North Sea, 1968â€“2010. Scientific Data, 2018, 5, 180126. | 5.3 | 8 |
| 86 | Impact of Acanthamoeba Cysts on Stress Resistance of Salmonella enterica Serovar Typhimurium, Yersinia enterocolitica 4/O:3, Listeria monocytogenes 1/2a, and Escherichia coli O:26. Applied and Environmental Microbiology, 2017, 83, . | 3.1 | 7 |
| 87 | Assessing the impact of beach nourishment on the intertidal food web through the development of a mechanisticâ€envelope model. Journal of Applied Ecology, 2014, 51, 1304-1313. | 4.0 | 6 |
| 88 | Selective and contextâ€dependent effects of chemical stress across trophic levels at the basis of marine food webs. Ecological Applications, 2018, 28, 1342-1353. | 3.8 | 6 |
| 89 | Light intensity and spectral composition drive reproductive success in the marine benthic diatom Seminavis robusta. Scientific Reports, 2021, 11, 17560. | 3.3 | 4 |
| 90 | Seasonal Variations in Flocculation and Erosion Affecting the Largeâ€Scale Suspended Sediment Distribution in the Scheldt Estuary: The Importance of Biotic Effects. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016805. | 2.6 | 3 |

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|---|---|---|---|
| 91 | Biodegradable, metal-chelating compounds as alternatives to EDTA for cultivation of marine microalgae. Journal of Applied Phycology, 2021, 33, 3519-3537. | 2.8 | 3 |
| 92 | Effect of pluronic block polymers and N-acetylcysteine culture media additives on growth rate and fatty acid composition of six marine microalgae species. Applied Microbiology and Biotechnology, 2021, 105, 2139-2156. | 3.6 | 2 |