

PUBLICATIONS 2014 - present

Di Gregorio L, Congestri R, Tandoi V, Neu TR, Rossetti S, Di Pippo F (2019) Biofilm diversity, structure and matrix seasonality in a full-scale cooling tower. *Biofouling*

Ellwood NWT, Congestri R, Ceschin S (2019) The role of phytoplankton in the diet of the bladderwort *Utricularia australis* R.Br. (Lentibulariaceae). *Freshwater Biology* 64: 233-243

Persichetti G, Viaggiu E, Testa G, Congestri R, Bernini R (2019) Spectral discrimination of planktonic cyanobacteria and microalgae based on deep UV fluorescence. *Sensors and Actuators. B, Chemical* 284: 228-235

Rugnini L, Ellwood NTW, Costa G, Falsetti A, Congestri R, Bruno L (2019) Scaling-up of wastewater bioremediation by *Tetradesmus obliquus*, sequential bio-treatments of nutrients and metals. *Ecotoxicology and Environmental Safety* 172: 59-64

Bellini E, Ciocci M, Savio S, Antonaroli S, Seliktar D, Melino S, Congestri R (2018) *Trichormus variabilis* (Cyanobacteria) biomass: from the nutraceutical products to novel EPS-cell/protein carrier systems. *Marine Drugs* 16

De Tommasi E, Congestri R, Managò S, De Luca AC, Dardano P, Rea I, De Stefano M (2018) UV-shielding and wavelength conversion by centric diatom nanopatterned frustules. *Scientific Reports* 8

Di Pippo F, Magni P, Congestri R (2018) Microphytobenthic biomass diversity and exopolymeric substances in a shallow dystrophic coastal lagoon. *Journal of Marine Microbiology* 2: 6-12

Di Pippo F, Di Gregorio L, Congestri R, Tandoi V, Rossetti S (2018) Biofilm growth and control in cooling water industrial systems. *Fems Microbiology Ecology* 94

Lvova L, Guanais Gonçalves C, Prodi L, Lombardo M, Zaccheroni N, Viaggiu E, Congestri R, Guzzella, L, Pozzoni F, Di Natale C, Paolesse R (2018) Non-enzymatic portable optical sensor for Microcystin-LR. *Chemical Communications*

Rugnini L, Costa G, Congestri R, Antonaroli S, Sanità di Toppi L, Bruno L (2018) Phosphorus and metal removal combined with lipid production by the green microalga *Desmodesmus* sp.: An integrated approach. *Plant Physiology and Biochemistry* 125: 45-51

Accoroni S, Totti C, Razza E, Congestri R, Campanelli A, Marini M, Ellwood N (2017) Phosphatase activities of a microepiphytic community during a bloom of *Ostreopsis cf. ovata* in the northern Adriatic Sea. *Water Research* 120: 272-279

Bellini E, Ciocci M, Savio S, Antonaroli S, Seliktar D, Melino SM, Congestri R (2017) *Trichormus Variabilis* (Nostocales, Cyanobacteria) Exopolymers for Hydrogel

Applications in Enzyme Encapsulation and Tissue Engineering. *Phycologia* 56: 15-15

Catherine A, Maloufi S, Congestri R, Viaggiu E, Pilkaityte R (2017) Cyanobacteria samples: preservation, abundance and biovolume measurements. In: Meriluoto J, Spoof L, Codd JA (eds) *Handbook of Cyanobacterial Monitoring and Cyanotoxin Analysis*. John Wiley & Sons Ltd., pp 315-330

Congestri R, Metcalf J, Lucentini L, Nigro Di Gregorio F (2017) Health and safety during sampling and in the laboratory. In: Meriluoto J, Spoof L, Codd JA (eds) *Handbook of Cyanobacterial Monitoring and Cyanotoxin Analysis*. John Wiley & Sons Ltd., pp 43-46

Congestri R, Micheli M, Palleschi G (2017) Monitoring domoic acid in marine phytoplankton by disposable immunosensors. *American Journal of Plant Sciences* 8: 1077-1091

Congestri R, Bellini E, Savio S, Antonaroli S (2017) Diatom- Based Biorefineries: Exopolymers, Lipids, and Biosilica from *Phaeodactylum Tricornutum*, *Staurosirella Pinnata* and *Thalassiosira Weissflogii*. *Phycologia* 56: 34-35

Di Gregorio L, Rossetti S, Tandoi V, Congestri R, Di Pippo F (2017) Unravelling the core microbiome of biofilms in cooling tower systems. *Biofouling* 33: 793-806

Di Pippo F, Congestri R (2017) Culturing toxic benthic blooms: the fate of natural biofilms microcosm system. *Microorganisms* 5

Gouveia L, Oliveira AC, Congestri R, Bruno L, Terra Soares A, Silva Menezes R, Antoniosi Filho NR, Tzovenis I (2017) Biodiesel from microalgae. In: Muñoz R, González C (eds) *Microalgae-Based Biofuels and Bioproducts*. Elsevier, pp 235-258

Lucentini L, La Sala L, Colagrossi R, Congestri R (2017) The Italian system for cyanobacteria risk management in drinking water chain. In: Meriluoto J, Spoof L, Codd JA (eds) *Handbook on Cyanobacterial Monitoring and Cyanotoxin Analysis*. Wiley, pp 100-107

Posadas E, Alcántara C, Pedro Antonio García-Encina PA, Gouveia L, Guiyesse B, Norvill Z, Acién FG, Markou G, Congestri R, Koreivienė J, Muñoz R (2017) Microalgae cultivation in wastewaters. In: Muñoz R, González C (eds) *Microalgae-Based Biofuels and Bioproducts*. Elsevier, pp 67-91

Rugnini L, Costa G, Congestri R, Bruno (2017) Testing of two different strains of microalgae for Cu and Ni removal from aqueous media. *Science of the Total Environment* 601-602: 959-967

Savio S, Bellini E, Canuti L, Canini A, Piredda L, Rodolfo C, Congestri R (2017) Characterization and Bioactivity of Mycosporine-Like Amino Acids Extracts of the

Diatoms Phaeodactylum Tricornutum, Staurosirella Pinnata and Thalassiosira Weissflogii. *Phycologia* 56: 167-167

Yéprémian C, Catherine A, Bernard C, Congestri R, Pilkaityte R (2017) Phycocyanin extraction. In: Meriluoto J, Spoof L, Codd JA (eds) *Handbook of Cyanobacterial Monitoring and Cyanotoxin Analysis*. John Wiley & Sons Ltd., pp 335-338

Yéprémian C, Catherine A, Bernard C, Congestri R, Pilkaityte R (2017) Chlorophyll a extraction. In: Meriluoto J, Spoof L, Codd JA (eds) *Handbook of Cyanobacterial Monitoring and Cyanotoxin Analysis*. John Wiley & Sons Ltd., pp 331-334

Bresciani M, Giardino C, Lauceri R, Matta E, Cazzaniga I, Pinardi M, Lami A, Austoni M, Viaggiu E, Congestri R, Morabito G (2016) Earth observation for monitoring and mapping of cyanobacteria blooms. Case studies on five Italian lakes. *Journal of Limnology* 76

De Angelis R, Melino S, Prospisito P, Casalboni M, Lamastra FRNF, Bruno L, Congestri R (2016) The diatom *Staurosirella pinnata* for photoactive material production. *Plos One* 11

Gandola E, Antonioli M, Traficante A, Franceschini S, Scardi M, Congestri R (2016) Dataset exploited for the development and validation of automated cyanobacteria quantification algorithm, ACQUA. *Data in Brief* 8: 817-823

Gandola E, Antonioli M, Traficante A, Franceschini S, Scardi M, Congestri R (2016) ACQUA: Automated Cyanobacterial Quantification Algorithm for toxic filamentous genera using spline curves, pattern recognition and machine learning. *Journal of Microbiological Methods* 124: 48-56

Gismondi A, Di Pippo F, Bruno L, Antonaroli S, Congestri R (2016) Phosphorus removal coupled to bioenergy production by three cyanobacterial isolates in a biofilm dynamic growth system. *International Journal of Phytoremediation* 18: 869-876

Lvova L, Guanais G, Petropoulos CK, Micheli L, Volpe G, Kirsanov D, Legin A, Viaggiu E, Congestri R, Guzzella L, Pozzoni F, Di Natale C, Paolesse R (2016) Electronic tongue for microcystin screening in waters. *Biosensors & Bioelectronics* 80: 154-160

Barone R, Congestri R, Viaggiu E, Manganelli M (2014) Analisi tassonomiche e conteggio. In: Funari E, Manganelli M, Testai E (eds) *Linee guida per la gestione delle fioriture dei cianobatteri nelle acque di balneazione*, pp 181-200

Di Caprio G, Coppola G, De Stefano L, De Stefano M, Antonucci A, Congestri R, De Tommasi E (2014) Shedding light on diatom photonics by means of digital holography. *Journal of Biophotonics* 7: 341-350

Di Pippo F, Ellwood NTW, Guzzon A, Bohn A, Congestri R (2014) Diversity and biomass accumulation in cultured phototrophic biofilms. European Journal of Phycology 49: 384-394

Ferrara MA, Dardano P, De Stefano L, Rea I, Coppola G, Rendina I, Congestri R, Antonucci A, De Stefano M, De Tommasi E (2014) Optical properties of diatom nanostructured biosilica in *Arachnoidiscus* sp: micro-optics from mother nature. Plos One

Lamastra FR, De Angelis R, AntonucciA, Salvatori D, Prospisito P, Casalboni M, Congestri R, Melino S, Nanni F (2014) Polymer composite random lasers based on diatom frustules as scatterers. Rsc Advances 4: 61809-61816

Lvova L, Guanais B, Petropoulos CK, Micheli L, Volpe G, Viaggiu E, Congestri R, Guzzella L, Pozzoni F, Di Natale C, Paolesse R (2014) E-tongue for ecological monitoring purposes: the case of microcystins detection. Procedia Engineering 87: 1358-1361