

SCOR WG130 Annex F: Publications in the domain of Research in Automated visual Plankton Identification, since 2003.

2003

1. Álvarez-Borrego, J. & Castro-Longoria, E. 2003. Discrimination between Acartia (Copepoda: Calanoida) species using their diffraction pattern in a position, rotation invariant digital correlation. *Journal of Plankton Research* 25(2): 229-233.
2. Cabrini M, Pecchiar I, Comisso S, Falconi C & Culverhouse P (2003). Classificazione automatizzata di fitoplancton tossico del Golfo di Trieste. *Biol. Mar. Medit.* 10(2): 984-986.
3. Castro-Longoria E, Alvarez-Borrego J, Rocha-Olivares A, Gomez S, Kober V Power of a multidisciplinary approach: use of morphological, molecular and digital methods in the study of harpacticoid cryptic species *MEPS Vol. 249: 297–303, 2003*
4. Culverhouse PF, Williams R, Reguera B, Herry V (2003) Expert And Machine Discrimination Of Marine Flora: a comparison of recognition accuracy of field-collected phytoplankton, *IEE Int. Conf. On Vision Information Engineering, May 23-25th Guildford. UK. Pp 177-183 ISBN 0 85296 757 8.*
5. Culverhouse PF, Williams R, Reguera B, Herry V, González-Gil S (2003) Do Experts Make Mistakes? *Mar-Ecol-Prog-Ser.* 247. 17-25
6. d'Alimonte, D., Zibordi, G., Phytoplankton determination in an optically complex coastal region using a multilayer perceptron neural network,, *GeoRS(41), No. 12, December 2003, pp. 2861-2868.*
7. Embleton, K. V., Gibson, C. E. & Heaney. S. I. 2003. Automated counting of phytoplankton by pattern recognition: a comparison with a manual counting method. *J. Plank. Res.* 25: 669-681.
8. Lcaraz, M., Saiz, E., Calbet, A., Trepas, I., and Broglio, E. 2003. Estimating zooplankton biomass through image analysis. *Mar. Biol.* 143: 307–315.
9. Olson, R. J., A. Shalapyonok, and H. M. Sosik. 2003. An automated submersible flow cytometer for analyzing pico- and nanophytoplankton: FlowCytobot. *Deep-Sea Research I.* 50: 301-315.
10. Powell JR Krotosky S, Ochoa B, Checkley D, Cosman, P (2003) , "Detection and identification of sardine eggs at sea using a machine vision system," *OCEANS 2003. Proceedings* , vol.1, no., pp.175 Vol.1, 2003

2004

1. Bollmann, J., Quinn, P. S., Vela, M. et al. (2004) Automated particle analysis: calcareous microfossils. In Francus, P. (ed.), *Image Analysis, Sediments and Paleoenvironments*. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 229–252.
2. Davis CS, Hu Q, Gallager SM, Tang X, Ashjian CJ (2004). Real-time observation of taxa-specific plankton distributions: an optical sampling method *MEPS* 284:77-96
3. Gaston, K.J. and M.A. O'Neill. 2004. Automated species identification: why not? *Philosophical Transactions of the Royal Society of London, Series B* 359: 655-667
4. Grosjean, P., Picheral, M., Warembourg, C. & Gorsky, G. 2004. Enumeration, measurement, and identification of net zooplankton samples using the ZOOSCAN digital imaging system. *ICES J. Mar. Sci.* 61: 518-525.
5. Luo, T., K Kramer, D.B. Goldgof, L.O. Hall, S. Samson, A. Remsen, T. Hopkins. 2004. Recognizing plankton images from the shadow image particle profiling evaluation recorder. *IEEE Transactions on Systems Man and Cybernetics Part B – Cybernetics* 34, 1753—1762.
6. Remsen A, Hopkins TL, Samson S(2004) What you see is not what you catch: a comparison of concurrently collected net, Optical Plankton Counter, and Shadowed Image Particle Profiling Evaluation Recorder. *Deep Sea Research Part I: vol 51(1) pp 129-151*

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1. Ashjian J, C. S. Davis, S. M. Gallager, and P. Alatalo (2005). "Characterization of the zooplankton community, size composition, and distribution in relation to hydrography in the Japan/East Sea" *Deep-Sea Res. Pt. II* 52, 363-392.
2. Blaschko, M.B.; Holness, G.; Mattar, M.A.; Lisin, D.; Utgoff, P.E.; Hanson, A.R.; Schultz, H.; Riseman, E.M.; , "Automatic In Situ Identification of Plankton," *Application of Computer Vision, 2005. WACV/MOTIONS '05 Volume 1. Seventh IEEE Workshop on* , vol.1, no., pp.79-86, 5-7 Jan. 2005

3. Hu, Q. and Davis, C. 2005. Automatic plankton image recognition with co-occurrence matrices and support vector machine. *Mar. Ecol. Prog. Ser.*, 295,21–31.
4. Luo, T., K. Kramer, D. Goldgof, L. Hall, S. Samson, A. Remsen and T. Hopkins (2005) . Active learning to recognize multiple types of plankton. *Journal of Machine Learning Research* 6: 589–613.
5. Zhao, F.[Feng], Tang, X.[Xiaoou], Lin, F.[Feng], Samson, S., Remsen, A (2005) Binary Plankton Image Classification Using Random Subspace, ICIP05(I: 357-360).

2006

1. Buskey EJ and Hyatt CJ (2006). Use of the FlowCAM for semi-automated recognition and enumeration of red tide cells (*Karenia brevis*) in natural plankton samples. *Harmful Algae* 5:685–92.
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4. González-Quirós, R. and Checkley, D. M., Jr (2006) Occurrence of fragile particles inferred from optical plankton counters used in situ and to analyze net samples collected simultaneously. *J. Geophys. Res.*, 111, C05S06.
5. Hu Q and Davis C (2006). Accurate automatic quantification of taxa- specific plankton abundance using dual classification with correction. *Mar. Ecol. Prog. Ser.*, 306, 51–61.
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1. Benfield MC, Grosjean P, Culverhouse PF, Irigoien X, Sieracki ME, Lopez-Urrutia A, Dam HG, Hu Q, Davis CB, Hansen A, Pilskaln CH, Riseman E, Schultz H, Utgoff PE, and Gorsky G (2007) RAPID: Research on Automated Plankton Identification. *Oceanography* 20(2), pp. 12-26.
2. Castro L.R., Valle-Levinson A., Sobarzo M., Chandia C. and Soto M., 2007. The ADCP-backscatter and the use of ZOOIMAGE for discriminating diel vertical migrating zooplankton. 4th International Zooplankton Production Symposium, 28 May-1 June 2007, Hiroshima, Japan
3. Culverhouse PF. (2007) Human and machine factors in algae monitoring performance. *Ecological Informatics* 2:361-366.
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5. Nerini D and Ghattas B (2007) Classifying densities using functional regression trees: Applications in oceanology. *Computational Statistics & Data Analysis* vol 51(10), pp. 4984-4993.
6. Sosik HM and OlsonRJ (2007). Automated taxonomic classification of phytoplankton sampled with imaging in-flow cytometry. *Limnology and Oceanography: Methods*, 5:204-216.
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11. Yoshida, H., & D.J. Lindsay. 2007. Development of the PICASSO (Plankton Investigatory Collaborating Autonomous Survey System Operon) System at the Japan Agency for Marine-Earth Science and Technology. *Japan Deep Sea Technology Society Report* 54: 5-10.
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