

Georgios SYLAIOS

Professor at Democritus University of Thrace

56 years old

Democritus University of Thrace

School of Engineering

Department of Environmental Engineering

Laboratory of Ecological Engineering & Technology, Director

Vas. Sofias 12, 67100 Xanthi, Greece

+30 25410 79398, mob. +30 6977 035235, mail: gsylaios@env.duth.gr

DEMOCRITUS UNIVERSITY OF THRACE (DUTH)

DUTH was founded in 1974 and is the only University in NE Greece. It is based in the four cities of Thrace (Xanthi, Komotini, Alexandroupoli and Orestiada) and educates about 25,000 students, distributed in the 8 Schools, 19 Departments and 28 Postgraduate Programs. DUTH employs 600 Professors of various specializations. The Department of Environmental Engineering in DUTH started operating in 1996 providing academic training following an interdisciplinary and multi-level approach. Students understand, study and solve sustainably environmental problems related to the atmosphere, surface waters and groundwater, soils and the living areas of modern Man, in which a multitude of technical, social, ecological and financial factors are involved. The Laboratory of Ecological Engineering and Technology covers all aspects of water and ecological research (inland surface and groundwater, coastal aquatic systems, integrated management of water and wastewater, etc.).

SUMMARY

Georgios Sylaios is a Full Professor at the Democritus University of Thrace (DUTH), Department of Environmental Engineering, Xanthi, Greece. He was the Department Chair in the period 2014-2016. At present he is the Director of the Laboratory of Ecological Engineering and Technology. He is physical oceanographer by training, with long experience in the coordination of European and nationally-funded research projects. Overall, he has coordinated 36 research projects with a total budget DUTH of 5.6MEuros. Currently he is the coordinator of the Blue Growth research project entitled ODYSSEA, funded by Horizon 2020 with a total budget of 8.4MEuros. His publication list includes 263 scientific publications, 82 of which are published in peer-reviewed international journals, 76 in peer-reviewed international proceedings, 51 in national proceedings, 42 technical reports, 1 e-book, 11 book chapters and 4 special issues as Guest Editor. His works have received >1,200 citations (h-index 20). He has been member of the UN Group of Experts for the "Second Assessment of the Global Ocean – Status, Trends and Challenges".

QUALIFICATIONS / EDUCATION

1994, PhD in Oceanography, Numerical Modeling and Management of Coastal Systems, University of Southampton, UK. **1992**, Diploma in Management Studies, University of Portsmouth, UK. **1991**, MSc in Oceanography, University of Southampton, UK. **1987**, Degree in Geology, University of Patras, Greece.

PROFESSIONAL EXPERIENCE:

2016-present, Professor at DUTH, Department of Environmental Engineering, Director of Laboratory of Ecological Engineering & Technology. **2012-2016**, Associate Professor at DUTH, Department of Environmental Engineering, Director of Laboratory of Ecological Engineering & Technology, **2007-2012**, Assistant Professor at DUTH, Department of Environmental Engineering. **2000-2007**, Researcher in the field 'Coastal Oceanography', Fisheries Research Institute, National Agricultural Research Foundation. **1998-2000**, Civil Servant C-grade, Regional Authority of East Macedonia & Thrace, Division for Planning and Development, Department of Water Resources Management. **1995-1997**, Research Assistant, Fisheries Research Institute, National Agricultural Research Foundation, **1988-1989**, Trainee, Commission of the European Communities, DG XII for Science, Research and Development, Program Marine Science and Technology (MA.S.T), **1987-1988**, Research Fellow, University of Patras.

TEACHING AND SUPERVISION:

Teaching at undergraduate level the following subjects: "Computer Programming in R language" (1st semester), "Physical Oceanography" (2nd semester), "Management of Coastal Aquatic Systems" (7th semester), "Environmental Coastal Engineering" (9th semester), "Environmental Fluid Mechanics" (9th semester).

Teaching at post-graduate level the following subjects: "Coastal Engineering and Technology" MSc Program in "Environmental Science and Technology"; "Natural resources and ecosystems" MSc Program in Environmental Technologies in Environmental Legislation; Lectures at the MSc "Environment and Behavior"; Lectures at the MSc "Management and Simulation of Environmental Systems".

Supervision of 9 Ph.D. and 40 MSc theses.

RESEARCH INTERESTS:

Research in management and operational modeling of hydrography and biogeochemistry in coastal aquatic systems; hydrology and nutrients management of streams and rivers (mostly heavily modified); precision irrigation and water saving technologies at farm scale; numerical models nesting, coupling and predictive operation; artificial intelligence; machine learning; neuro-fuzzy modeling.

LEADERSHIP, COORDINATION AND PARTICIPATION IN PROJECTS (36 projects, Total Grants: 5,637,000 euros):

2021 – 2024, RTD Project Manager, Workpackage Leader, “ILIAD: Integrated Digital Twins for Marine and Maritime data and Information Services”, Horizon Green Deal, Budget: 423,750.00 euros.

2021 – 2024, Workpackage Leader, “ECOSCOPE: Ecocentric management for sustainable fisheries and healthy marine ecosystems”, Horizon 2020, Budget: 452,500.00 euros.

2020 – 2023, Workpackage Leader, “Eye4Water: Strengthening the water management practices (in EMT-R) through the development of innovative ICT methodologies and improvement of research infrastructures”, GSRT, Regional Excellence Program, Budget: 1,426,339.40 euros.

2017-2021, Coordinator of the Horizon2020 funded project **“ODYSSEA: Operation of a network of integrated observatory systems in the Mediterranean Sea”**. The Project has a budget of 8.4 MEuros and involves 29 partners. Budget: 407,500.00 euros.

2020 – 2022, Partner, “PONTOS: Copernicus assisted environmental monitoring across the Black Sea Basin”, Interreg Black Sea Basin, Budget: 160,432.28 euros.

2017 – 2020, Scientific Coordinator, “HERMES: Harmonized framework to Mitigate coastal Erosion promoting ICZM protocol implementation”, Interreg Balkan Med, Budget: 175,573.44 euros.

2017-2020, Partner, “DANUBIUS – PP: Preparatory phase for the Pan-European Research Infrastructure DANUBIUS–RI “The International Centre for Advanced Studies on River-Sea Systems”, Horizon2020 - INFRADEV Project, Budget: 57,350 euros.

2014-2015, Project Coordinator, “KALLIPOS Project for E-book entitled: ‘Environmental Computational Fluid Mechanics”, KALLIPOS, Ministry of Education, Budget: 10,000 Euros.

2014-2015, Project Coordinator, “Specialized services for data collection, hydraulic models application, scenario analysis and supply of scientific instrumentation”, Municipality of Thessaloniki, Budget: 38,000 Euros.

2014-2018, Greek National Representative, Cost Action EOS 1402 “Evaluation of Ocean Syntheses”. Participant in the WG4 “Downscaling issues from global to regional syntheses”, COST Action Program, Budget: 10,000 Euros.

2013-2015, Scientific Coordinator, “WASTEnet – A Black Sea Network Promoting Natural Systems for the Integrated Water and Wastewater Management at Drainage Basin Scale”, Black Sea Basin CBC Program, Budget: 75,000 Euros.

2013-2015, WorkPackage Leader, “MARE NOSTRUM: Bridging the Implementation Gap – Facilitating Cross-border ICZM implementation by lowering legal – institutional barriers in the MSB”, ENPI CBC-MED Program, Budget: 256,000 Euros.

2012-2016, Partner, “FIGARO: Flexible and Precision Irrigation Platform to Improve Farm Scale Water Productivity” (www.figaro-irrigation.net/), EU FP7 R&D Program, Budget: 280,000 Euros.

2011-2015, Project Coordinator, “Vocational Training of Department Environmental Engineering Students”, Ministry of Education, Budget: 121,000 Euros.

2011-2012, Expert External Participant, “KUNSHEN: Barrier island hydro-morphodynamics driven by typhoon events”, Taiwan-France Bilateral Science Collaboration Program, Budget: 26,000 Euros.

2010-2011, Workpackage Leader, “ULYSSES: Using Applied research results from ESPON as a yardstick for cross-border spatial development planning”, ESPON Project, Budget: 39,200 Euros.

2009, Project Coordinator, “Development of scientific software and environmental database for the Nestos River National Park”, Management Body of Nestos River and Vistonis-Ismaris Lagoons Natural Protected Area, Budget: 10,000 Euros.

2009, Project Coordinator, “Collection and assessment of existing environmental studies and research results for the Nestos River National Park”, Management Body of Nestos River and Vistonis-Ismaris Lagoons Natural Protected Area, Budget: 10,000 Euros.

2009, Project Coordinator, “Oceanographic, wave and coastal engineering study for the modernization of the Old Harbor of Kavala City”, Kavala Port Authority, Budget: 23,000 Euros.

2009-2010, Project Leader, “Healthy Rivers and the Implementation of Sustainable Water Resources Management in China”, EU-China Forum project, Budget: 25,000 Euros.

2008, Participant, “UNESCO Ecohydrology Student Exchange Program”, UNESCO Ecohydrology Grants, Budget: 10,000 Euros.

2007-2009, Project Coordinator, “Scientific management and implementation of EPPER Project”, Management Body of Nestos River and Vistonis-Ismaris Lagoons Natural Protected Area, Budget: 30,000 Euros.

2007-2009, Workpackage Leader, “Nestos WFD: Implementation of environmental monitoring of surface and underground water resources in Nestos River drainage basin”, Ministry of Environment, Pilot study under the requirements of Water Framework Directive, Budget: 800,000 Euros.

2007, Project Coordinator, “ManageMED - Collection of physical, chemical and environmental data from Nestos River Lagoons”, Technical University of Kavala, Budget: 10,000 Euros.

2006, Participant, “Technical and Environmental Study for the deployment of an artificial reef in the marine area of Kitros, Pieria”, Ministry of Agriculture, Budget: 130,000 Euros.

2006-2007, Project Coordinator, “Development and improvement of infrastructure at the Fisheries Research Institute”, Regional Authority of East Macedonia – Thrace, Budget: 870,000 Euros.

2006-2008, Workpackage Leader, Interreg IVC Med Project “BEACHMED-E / NAUSICAA: Wave and hydrodynamic climate monitoring and modelling”, Interreg IVC CBC-Med Project, Budget: 76,630 Euros.

2006-2008, Project leader, “**Interplume**: Monitoring and modelling of water quantity and quality of Nestos River plume – Implications of River Damming, Interreg IIIA Greece-Bulgaria, Budget: 80,000 Euros.

2006-2008, Project Coordinator, “**INTERFISH**: Management Actions for the Protection and Sustainability of Nestos River Fish Fauna”, Interreg IIIA Greece-Bulgaria Project, Budget: 163,532 Euros.

2005, Partner, “**HERMES**: Science and Technology Promotion Week”, General Secretariat for Research and Technology, Budget: 10,000 Euros.

2005-2006, Workpackage Leader, “Biological sampling with experimental purse seine in the marine area of the Republic of Cyprus”, Ministry of Fisheries, Cyprus, Budget: 25,000 Euros.

2003-2006, Workpackage Leader, “**ANREC** - Association of Physical and Biological processes acting on Recruitment and Post-Recruitment stages of Anchovy”, FP6 R&D Project, Budget: 82,000 Euros.

2002-2005, Scientific Coordinator, “Habitat Management and Raptor Conservation in Nestos Delta and Gorge”, LIFE-Nature Project, Budget: 58,000 Euros.

2002-2004, Project Coordinator, “Assessment of the environmental quality of the coastal marine environment of Kavala Gulf, N. Greece”, Prefectural Authority of Kavala, Budget: 67,150 Euros.

2002-2003, Project Coordinator, “Institution Building for the Maltese Department of Fisheries and Aquaculture”, PHARE Twining Project, budget: 77,000 euros.

2001, Project Coordinator, “Assessment of Environmental Impacts from the construction and operation of the Burgas - Alexandroupolis oil pipeline”, Ministry of Environment, budget: 6,000 euros.

PUBLICATIONS:

The publication list includes 263 scientific publications. 82 are published in peer-reviewed international journals, 74 are published in peer-reviewed international proceedings, 51 in national proceedings, 42 technical reports, 1 e-book, 9 book chapters, 4 special issues as Guest Editor. >1,200 citations, H-index = 20.

Peer Reviewed Papers

Kokkos, N., Zoidou, M., Zachopoulos, K., Majidi Nezhad, M., Astiaso Garcia, D., Sylaios, G., 2021. Wind climate and wind power resource assessment based on gridded scatterometer data: A Thracian Sea case study. *Energies*, 14(12), 3448; <https://doi.org/10.3390/en14123448>.

Tsakmakis, I., Gikas, G., Sylaios, G., 2020. Integration of Sentinel-derived NDVI to reduce uncertainties in the operational field monitoring of maize. *Agricultural Water Management* 225, 106998, <https://doi.org/10.1016/j.agwat.2021.106998>.

Majidi Nezhad, M., Neshat, M., Groppi, D., Marzalletti, P., Heydari, A., Sylaios, G., Astiaso Garcia, D., 2021. A primary wind farm site assessment using reanalysis data: A case study for Samothraki Island. *Renewable Energy* 172, 667-679. <https://doi.org/10.1016/j.renene.2021.03.045>

Dimarchopoulou, D., Keramidas, I., Sylaios, G. & A. Tsikliras (2021). Ecotrophic effects of fishing across the Mediterranean Sea. *Water* 13, 482, <https://doi.org/10.3390/w13040482>.

Keramea, P., Spanoudaki, K., Zodiatis, G., Gikas, G., & G. Sylaios (2021). Oil Spill Modeling: A Critical Review on Current Trends, Perspectives and Challenges. *Journal of Marine Engineering and Science* 9, 181, <https://doi.org/10.3390/jmse9020181>.

Zerva, I., Remmas, N., Kagkalou, I., Melidis, P., Ariantsi, M., Sylaios G. & S. Ntougias (2021). Effect of chlorination on the microbiological effluent quality of a full-scale wastewater treatment plant through assessment of bacterial communities by high-throughput amplicon sequencing. *Life* 11(1), 68, [doi:10.3390/life11010068](https://doi.org/10.3390/life11010068)

Effrosynidis, D., Tsikliras, A., Arampatzis, A. & G. Sylaios (2020). Species Distribution Modelling via Feature Engineering and Machine Learning for Pelagic Fishes in the Mediterranean Sea. *Applied Sciences* 10, 8900, doi:10.3390/app10248900.

Papaki, D., Kokkos, N. & G. Sylaios (2020). A Fuzzy Inference System for Seagrass Distribution Modeling in the Mediterranean Sea: A First Approach. *Water* 12, 2949; doi:10.3390/w12102949.

Zachopoulos, K., Kokkos, N. & G. Sylaios (2020). Salt wedge intrusion modeling along a Mediterranean river mouth. *Regional Studies in Marine Science* 39, 101467.

Gikas, G., Sylaios, G.K., Tshrintzis, V.A., Konstantinou, I.K., Albanis, T. & I., Boskidis (2020). Comparative evaluation of river chemical status based on WFD methodology and CCME water quality index. *Science of the Total Environment* 745, 140849, <https://doi.org/10.1016/j.scitotenv.2020.140849>.

Mertzaniades, Y., Tsakmakis, I., Kargiotis, E. & G. Sylaios (2020). Electrical resistivity tomography monitoring of soil moisture dynamics on a precision irrigation experiment in Northern Greece. *International Agrophysics* 34, 309-319, doi: 10.31545/intagr/123943.

- Tsapanou, A., Oikonomou, E., Drakopoulos, P., Poulos, S. & G. Sylaios (2020). Coupling remote sensing data with in-situ optical measurements to estimate suspended particulate matter under the Evros river influence (North-East Aegean Sea, Greece). *International Journal of Remote Sensing*, 41:6, 2062-2080, DOI: 10.1080/01431161.2019.1685713.
- Tintoré, J., Pinardi, N., ..., Sylaios, G., (2019). Challenges for Sustained Observing and Forecasting Systems in the Mediterranean Sea. *Frontiers in Marine Science* 6, 568, doi: 10.3389/fmars.2019.00568.
- Effrosynidis, D., Arampatzis, A. & G. Sylaios (2019). Seagrass and Hydrographic Data for the Mediterranean Sea. *Data in Brief* 25, 104286, <https://doi.org/10.1016/j.dib.2019.104286>
- Stamatis, N., Kamidis, N., Sylaios, G. & E. Koutrakis (2019). Ecological Risk Assessment of Heavy Metals in the Sediments of three Semi-enclosed East Mediterranean Gulfs. *Toxics* 7(2), 30; doi:10.3390/toxics7020030.
- Linker, R., Sylaios, G., Tsakmakis, I., Ramos, T., Simionesei, L., Plauborg, F. and A. Battilani, (2018). Sub-optimal model-based irrigation scheduling with realistic weather forecasts. *Irrigation Science* 36(6), 349-362
- Tsakmakis, I.D., Kokkos, N.P., Gikas, G.D., Pinaras, V., Hatzigiannakis, E. Arampatzis, G. & G. Sylaios (2018). AquaCrop model evaluation in cotton crop simulation under deficit irrigation conditions with an emphasis on root growth pattern. *Agricultural Water Management* 213(1), 419-432
- Effrosynidis, D., Arampatzis, A. & G. Sylaios (2018). Seagrass Detection in the Mediterranean: A Supervised Learning Approach. *Ecological Informatics* 48, 158-170.
- Kalpakis, V., Kokkos, N., Pinaras, V. & G. Sylaios (2018). Developing an integrated coastal zone observatory prototype at Municipal level: the case of Kavala Municipality, NE Greece. *Journal of Coastal Conservation*, <https://doi.org/10.1007/s11852-018-0646-5>
- Boskidis, I., Kokkos, N., Sapounidis, A., Triantafyllidis, S., Koutrakis, E. and G. Sylaios (2018). Ecohydraulic modeling of Nestos River delta under low flow regimes. *Ecohydrology and Hydrobiology* 18, 391-400. <https://doi.org/10.1016/j.ecohyd.2018.06.004>.
- Zoidou, M., Tsakmakis, I.D., Gikas, G.D. and G. Sylaios (2017). Water Footprint for cotton irrigation scenarios utilizing CROPWAT and AquaCrop models. *European Water* 59, 285-290.
- Tsakmakis, I.D., Zoidou, M., Gikas, G.D. and G. Sylaios (2018). Impact of irrigation technologies and strategies on cotton water footprint using AquaCrop and CROPWAT Models. *Environmental Processes* 5, Suppl. 1, 181-199, <https://doi.org/10.1007/s40710-018-0289-4>.
- Koutrakis, E., Triantafyllidis, S., Sapounidis, A.S., Vezza, P., Kamidis, N., Sylaios, G. and C. Comoglio (2018). Evaluation of ecological flows in highly regulated rivers using the mesohabitat approach: a case study in North Greece. *Ecohydrology and Hydrobiology* 19(4), 598-609.
- Milani, C.B., Vella, A., Vidoris, P., Christidis, A., Koutrakis, E., Sylaios, G., Kallianiotis, A., (2017). Encounter rate and relative abundance of bottlenose dolphins and distribution modelling of main cetacean species in the North Aegean Sea (Greece). *Journal of Black Sea/Mediterranean Environment* 23(2), 101-120.
- Kamidis, N., Sylaios, G., (2017). Impact of River Damming on Sediment Texture and Trace Metals Distribution along the Watershed and the Coastal Zone of Nestos River (NE Greece). *Environmental Earth Science* 76, 373. doi:10.1007/s12665-017-6707-5.
- Melidis, P., Sylaios, G. (2017). Assessment of pollutant loadings from wastewater treatment plants in Kavala gulf. *Environmental Processes* 4(2), 421-437, doi:10.1007/s40710-017-0214-2
- Tsakmakis, I., Kokkos, N., Pinaras, V., Papaevangelou, V., Hatzigiannakis, E., Arampatzis, G., Gikas, G.D., Linker, R., Zoras, S., Evagelopoulos, V., Tsihrintzis, V.A., Sylaios, G. (2017). Operational Precise Irrigation for Cotton Cultivation through the coupling of Meteorological, and Crop Growth Models. *Water Resources Management* 31(1), 563-580.
- Linker, R. & G. Sylaios (2016). Efficient model-based sub-optimal irrigation scheduling using imperfect weather forecasts. *Computers and Electronics in Agriculture* 130, 118-127.
- Sylaios, G., Gkikas, G., & V.A. Tsihrintzis (2016). Editorial, Special Issue on WASTEnet International Conference. *European Water* 53, 3-4.
- Symeonidis, P., Boskidis, I., Taskaris, S., Sylaios, G., Giannaros, T., Seferlis, M., Petrakakis, M., Kelesis, A., Tzoumaka, P., 2016. Integrated Coastal Monitoring of Environmental Problems in a Sea Region and ways of their solution. *European Water* 53, 27-35.
- Sylaios, G., Gkikas, G., & V.A. Tsihrintzis (2016). Sustainable solutions to wastewater management: Maximizing the impact of territorial co-operation. *Environmental Processes* 3 (Suppl. 1), S1-S3, Editorial.
- Kotti, I., Sylaios, G., & V.A. Tsihrintzis (2015). Fuzzy Logic Models for Nitrogen and Phosphorus Removal Prediction in Free-Water Surface Constructed Wetlands. *Environmental Processes* 3 Suppl. 1, S65-S79.
- Anastasiou, S. & G. Sylaios (2016). Assessment of Shoreline Changes and Evaluation of Coastal Protection Methods to Mitigate Erosion. *Coastal Engineering Journal* 58(2), 10.1142/S0578563416500066.
- Kokkos, N. & G. Sylaios (2016). Modeling the buoyancy-driven Black Sea Water flow into North Aegean Sea. *Oceanologia* 58(2), 103-116, doi:10.1016/j.oceano.2015.12.003.
- Koutrakis, M., Emfietzis, G., Sylaios, G., Zoidou, M., Katsiapi, M., Moustaka-Gouni, M. (2016). Massive fish fauna mortality in Ismarida Lake, Northern Greece: Identification of drivers contributing to the mortality event. *Mediterranean Marine Science* 17(1), 280-291, DOI: 10.12681/mms.1481.
- Linker, R., Ioslovich, I., Sylaios, G., Plauborg, F. & A. Battilani (2016). Optimal model-based deficit irrigation scheduling using AquaCrop: a simulation study with cotton, potato and tomato. *Agricultural Water Management* 163, 236-243.
- Sylaios, G., Lalenis, K., Anastasiou, S., Papatheocharis, I. & N. Kokkos (2015). Coastal Setbacks Demarcation over Rough, Impermeable Shores: The Case of Kavala Municipality (Northern Greece). *Coastal Management* 43(5), 519-538.

- Anastasiou, S., G. Sylaios & V.A. Tsihrintzis (2015). Suspended Particulate Matter estimates using Optical and Acoustic Sensors: Application in Nestos River Plume (Thracian Sea, North Aegean Sea). *Environmental Monitoring & Assessment* 187(6), 392.
- Koutrakis, E., Sapounidis, A., Apostolou, A., Vassilev, M., Pehlivanov, L., Leontarakis, P., Tsekov, A., Sylaios, G. & P.S. Economidis (2014). An integrated ichthyofaunal survey in a heavily-modified, cross-border watershed. *Journal of Biological Research-Thessaloniki* 20, 326-338.
- Anastasiou, S. & G. Sylaios (2013). Nearshore wave field simulation at the lee of a large island. *Ocean Engineering* 74, 61-71.
- Sylaios, G., Kamidis, N., Anastasiou, S. & V.A. Tsihrintzis (2013). Hydrodynamic response of Thassos Passage (N. Aegean Sea) to Nestos River discharge and meteorological forcing. *Continental Shelf Research* 59, 37-51.
- Kotti, I.P., Sylaios, G.K. & V.A. Tsihrintzis (2013). Fuzzy logic models for BOD and COD removal prediction in free-water surface constructed wetlands. *Ecological Engineering* 51, 66-74.
- Sylaios, G., Anastasiou, S. & V.A. Tsihrintzis (2012). Restoration of a seashore eroded due to dam operation through beach nourishment. *Ecology & Hydrobiology* 12(2), 123-135.
- Boskidis, I., Gikas, G.D., Sylaios, G.K. & V.A. Tsihrintzis (2012). Hydrologic and water quality modeling of lower Nestos River basin. *Water Resources Management* 26 (10), 3023-3051.
- Sylaios, G., Kamidis, N. & N. Stamatis (2012). Assessment of trace metals contamination in the suspended matter and the sediments of a semi-enclosed Mediterranean Gulf. *Soil & Sediment Contamination: An International Journal* 21, 673-700.
- Boskidis, I., Gikas, G., Sylaios, G., Tsihrintzis, V.A. (2011). Water quantity and quality assessment of lower Nestos River, Greece. *Journal of Environmental Science and Health - Part A* 46(10), 1050-1067.
- Kamidis, N., Sylaios, G. & V.A. Tsihrintzis (2011). Modelling Nestos River plume dynamics using ELCOM. *Desalination & Water Treatment* 33, 22-35.
- Sylaios, G. (2011). Meteorological influence on the surface hydrographic patterns of the North Aegean Sea. *Oceanologia*, Vol. 53(1), 57-80.
- Haralambidou, K., Sylaios, G. & V.A. Tsihrintzis (2010). Salt wedge propagation in a Mediterranean micro-tidal river mouth. *Estuarine, Coastal & Shelf Science*, Vol. 90, 174-184.
- Sylaios, G. & T. Koutroumanidis (2010). Ranking and classification of coastal fishing grounds using fuzzy models and techniques. *Fisheries Management & Ecology*, Vol. 17, 240-253.
- Sylaios, G.K., Kamidis, N. & V.A. Tsihrintzis (2010). Impact of river damming on the coastal stratification-mixing processes: The cases of Strymon and Nestos Rivers, Greece. *Desalination*, Vol. 250(1), 302-312.
- Sylaios, G., Bouchette, F., Denamiel, C. & V.A. Tsihrintzis (2009). A Fuzzy Inference System for the prediction of wave characteristics based on long-term wind and wave measurements. *Ocean Engineering*, Vol. 36, 1358-1365.
- Tsikliras, A., Koutrakis, E., Sylaios, G. & A. Kallianiotis (2009). Summer distribution of fish larvae in the Northern Aegean Sea. *Journal of the Marine Biological Association of the U.K.*, Vol. 89 (6), 1137-1146.
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- Koutroumanidis, T., Sylaios, G., Zafeiriou, E. & V.A. Tsihrintzis (2009). Genetic Modeling for the Optimal Forecasting of Hydrologic Time-Series: Application in Nestos River. *Journal of Hydrology*, Vol. 368(1-4), 156-164.
- Sylaios, G.K. & V.A. Tsihrintzis (2009). A budget model to scale the biogeochemical cycles in two semi-enclosed coastal water bodies. *Environmental Modelling & Assessment*, Vol. 14(1), 59-72.
- Sylaios, G.K., Gitsakis, N., Koutroumanidis, T. & V.A. Tsihrintzis (2008). CHLfuzzy: A Spreadsheet Tool for the Fuzzy Modeling of Chlorophyll-a Concentrations in Coastal Lagoons, *Hydrobiologia*, Vol. 610(1), 99-112.
- Tsihrintzis V.A., Sylaios, G.K., Sidiropoulou, M. & E. Koutrakis (2007). Hydrodynamic modeling and management alternatives in a Mediterranean, fishery exploited, coastal lagoon. *Aquacultural Engineering*, Vol. 36(3), 310-324.
- Akratos, C.S., Tsihrintzis, V.A., Pehlivanidis, I., Sylaios, G.K. & H. Jerrentrup (2007). A free water surface constructed wetland for the treatment of agricultural drainage entering Vassova Lagoon, Kavala, Greece. *Fresenius Environmental Bulletin*, Vol. 15(12), 1-9.
- Markou, D., Gikas, G., Haralambidou, K., Sylaios, G. & V.A. Tsihrintzis (2007). Impact of bottom sediments on water quality of Vistonis Lagoon. *Desalination*, Vol. 210, 83-97.
- Sylaios, G., Tsihrintzis, V.A. & K. Haralambidou (2006). Modeling stratification – mixing processes at the mouth of a dam-controlled river. *European Water*, Vol. 13/14, 21-28.
- Markou, D.A., Sylaios, G.K., Gikas, G.D. & V.A. Tsihrintzis (2006). Assessment of bottom sediment contribution to lagoon eutrophication. *Fresenius Environmental Bulletin*, Vol. 9B, 1168-1173.
- Koutroumanidis Th., Iliadis, L. & G. Sylaios (2006). Time-series modeling of anchovy landings using ARIMA and Fuzzy Expected Intervals Software. *Environmental Modeling and Software*, Vol. 21(12), 1711-1721.
- Sylaios, G.K., Tsihrintzis, V.A., Akratos, C. & K. Haralambidou (2006). Quantification of Water, Salt and Nutrient Exchange Processes at the Mouth of a Mediterranean Coastal Lagoon. *Environmental Monitoring & Assessment*, Vol. 119(1-3), 275-301.
- Stamatis, N., Kamidis, N. & G. Sylaios (2006). Sediment and suspended matter lead contamination in the gulf of Kavala, Greece. *Environmental Monitoring & Assessment*, Vol. 115(1-3), 433-449.

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- Haralambidou, K., Sylaios, G.K., & V.A. Tsihrintzis (2005). Testing alternatives for salt wedge management in an estuary with the use of monitoring and mathematical model. *Global Nest: The International Journal*, Vol. 5(2), 105-116.
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