

# Olivier Bernard

## List of Publications by Year in descending order

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223  
papers

11,815  
citations

34105

52  
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30922

102  
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226  
all docs

226  
docs citations

226  
times ranked

9772  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Pipeline for the Generation of Synthetic Cardiac Color Doppler. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 932-941.	3.0	5
2	Motion Estimation by Deep Learning in 2D Echocardiography: Synthetic Dataset and Validation. IEEE Transactions on Medical Imaging, 2022, 41, 1911-1924.	8.9	11
3	Optimal Darwinian Selection of Microorganisms with Internal Storage. Processes, 2022, 10, 461.	2.8	6
4	Understanding photosynthetic biofilm productivity and structure through 2D simulation. PLoS Computational Biology, 2022, 18, e1009904.	3.2	5
5	ALBA: A comprehensive growth model to optimize algae-bacteria wastewater treatment in raceway ponds. Water Research, 2021, 190, 116734.	11.3	53
6	Modeling the Influence of Temperature, Light Intensity and Oxygen Concentration on Microalgal Growth Rate. Processes, 2021, 9, 496.	2.8	13
7	Physics-constrained intraventricular vector flow mapping by color Doppler. Physics in Medicine and Biology, 2021, 66, 245019.	3.0	6
8	Proposed Requirements for Cardiovascular Imaging-Related Machine Learning Evaluation (PRIME): A Checklist. JACC: Cardiovascular Imaging, 2020, 13, 2017-2035.	5.3	123
9	Cardiac Segmentation With Strong Anatomical Guarantees. IEEE Transactions on Medical Imaging, 2020, 39, 3703-3713.	8.9	72
10	Real-Time Automatic Ejection Fraction and Foreshortening Detection Using Deep Learning. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2595-2604.	3.0	48
11	LU-Net: A Multistage Attention Network to Improve the Robustness of Segmentation of Left Ventricular Structures in 2-D Echocardiography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2519-2530.	3.0	23
12	A Pilot Study on Convolutional Neural Networks for Motion Estimation From Ultrasound Images. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2565-2573.	3.0	20
13	Picoeukaryotes of the <i>Micromonas</i> genus: sentinels of a warming ocean. ISME Journal, 2019, 13, 132-146.	9.8	35
14	Evaluation of the feasibility of photosynthetic biogas upgrading: Simulation of a large-scale system. Energy, 2019, 189, 116313.	8.8	6
15	Meteorological Data-Based Optimal Control Strategy for Microalgae Cultivation in Open Pond Systems. Complexity, 2019, 2019, 1-12.	1.6	10
16	Deep Learning for Segmentation Using an Open Large-Scale Dataset in 2D Echocardiography. IEEE Transactions on Medical Imaging, 2019, 38, 2198-2210.	8.9	292
17	Microalgae and cyanobacteria modeling in water resource recovery facilities: A critical review. Water Research X, 2019, 2, 100024.	6.1	57
18	Twelve quick tips for designing sound dynamical models for bioprocesses. PLoS Computational Biology, 2019, 15, e1007222.	3.2	8

#	ARTICLE	IF	CITATIONS
19	Segmentation of apical long axis, four- and two-chamber views using deep neural networks. , 2019, , .		11
20	The impact of light supply to moving photosynthetic biofilms. Algal Research, 2019, 44, 101674.	4.6	15
21	RU-Net: A refining segmentation network for 2D echocardiography. , 2019, , .		12
22	Dynamical reduction of linearized metabolic networks through quasi steady state approximation. AICHE Journal, 2019, 65, 18-31.	3.6	4
23	Cardiac MRI Segmentation with Strong Anatomical Guarantees. Lecture Notes in Computer Science, 2019, , 632-640.	1.3	24
24	Realistic Vendor-Specific Synthetic Ultrasound Data for Quality Assurance of 2-D Speckle Tracking Echocardiography: Simulation Pipeline and Open Access Database. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 411-422.	3.0	33
25	Full-scale validation of an algal productivity model including nitrogen limitation. Algal Research, 2018, 31, 377-386.	4.6	14
26	A Framework for the Generation of Realistic Synthetic Cardiac Ultrasound and Magnetic Resonance Imaging Sequences From the Same Virtual Patients. IEEE Transactions on Medical Imaging, 2018, 37, 741-754.	8.9	31
27	Deep Learning Applied to Multi-Structure Segmentation in 2D Echocardiography: A Preliminary Investigation of the Required Database Size. , 2018, , .		6
28	Modelling an Artificial Microalgae-Cyanobacteria Ecosystem. IFAC-PapersOnLine, 2018, 51, 655-660.	0.9	0
29	Maximizing microalgae productivity in a light-limited chemostat $\hat{z}$ $\hat{z}$ This work was supported by the CONICYT doctoral grant (Carlos MartÁnez), and by the Phycover (ANR-14-CE04-0011) and IPL Algae in silico (INRIA) projects.. IFAC-PapersOnLine, 2018, 51, 735-740.	0.9	10
30	Analytical Reduction of Nonlinear Metabolic Networks Accounting for Dynamics in Enzymatic Reactions. Complexity, 2018, 2018, 1-22.	1.6	3
31	Optimizing CO2 transfer in algal open ponds. Algal Research, 2018, 35, 530-538.	4.6	15
32	How do microalgae perceive light in a high-rate pond? Towards more realistic Lagrangian experiments. Royal Society Open Science, 2018, 5, 180523.	2.4	22
33	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. IEEE Transactions on Medical Imaging, 2018, 37, 2514-2525.	8.9	926
34	Theory of turbid microalgae cultures. Journal of Theoretical Biology, 2018, 456, 190-200.	1.7	36
35	Left ventricle segmentation in 3D ultrasound by combining structured random forests with active shape models. , 2018, , .		2
36	Temperature is a key factor in <i>Micromonas</i> virus interactions. ISME Journal, 2017, 11, 601-612.	9.8	56

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37	Robustness of bioprocess feedback control to biodiversity. <i>AICHE Journal</i> , 2017, 63, 2742-2750.	3.6	3
38	Coupling and uncoupling of triglyceride and beta-carotene production by <i>Dunaliella salina</i> under nitrogen limitation and starvation. <i>Biotechnology for Biofuels</i> , 2017, 10, 25.	6.2	43
39	Exploiting meteorological forecasts for the optimal operation of algal ponds. <i>Journal of Process Control</i> , 2017, 55, 55-65.	3.3	24
40	Maximizing microalgae productivity by shading outdoor cultures * *This work was supported by the CONICYT doctoral grant (Carlos Martnez), and by the Phycover (ANR-14-CE04-0011) and Purple Sun (ANR-13-BIME-0004) projects. F. Mairet is grateful to ��FMJH Program Gaspard Monge in optimization and operation research��. <i>IFAC-PapersOnLine</i> , 2017, 50, 8734-8739.	0.9	9
41	Modeling the temperature effect on the specific growth rate of phytoplankton: a review. <i>Reviews in Environmental Science and Biotechnology</i> , 2017, 16, 625-645.	8.1	48
42	A time-space model for the growth of microalgae biofilms for biofuel production. <i>Journal of Theoretical Biology</i> , 2017, 432, 55-79.	1.7	17
43	Standardized Delineation of Endocardial Boundaries in Three-Dimensional Left Ventricular �chocardiograms. <i>Journal of the American Society of Echocardiography</i> , 2017, 30, 1059-1069.	2.8	10
44	heartBEATS: A hybrid energy approach for real-time B-spline explicit active tracking of surfaces. <i>Computerized Medical Imaging and Graphics</i> , 2017, 62, 26-33.	5.8	2
45	Fast and Fully Automatic Left Ventricular Segmentation and Tracking in Echocardiography Using Shape-Based B-Spline Explicit Active Surfaces. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 2287-2296.	8.9	56
46	Modeling the impact of high temperatures on microalgal viability and photosynthetic activity. <i>Biotechnology for Biofuels</i> , 2017, 10, 136.	6.2	63
47	Calibration of a productivity model for the microalgae <i>Dunaliella salina</i> accounting for light and temperature. <i>Algal Research</i> , 2017, 21, 156-160.	4.6	14
48	A fully automatic and multi-structural segmentation of the left ventricle and the myocardium on highly heterogeneous 2D echocardiographic data. , 2017, , .		8
49	The next generation of microalgae production systems under photovoltaic greenhouses. <i>Acta Horticulturae</i> , 2017, , 921-928.	0.2	3
50	Dynamic metabolic modeling of heterotrophic and mixotrophic microalgal growth on fermentative wastes. <i>PLoS Computational Biology</i> , 2017, 13, e1005590.	3.2	29
51	Continuous selection pressure to improve temperature acclimation of <i>Tisochrysis lutea</i> . <i>PLoS ONE</i> , 2017, 12, e0183547.	2.5	24
52	Phase-Based Registration of Cardiac Tagged MR Images by Incorporating Anatomical Constraints. <i>Lecture Notes in Computer Science</i> , 2017, , 39-47.	1.3	0
53	Hybrid Strategy to Simulate 3-D Nonlinear Radio-Frequency Ultrasound Using a Variant Spatial PSF. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016, 63, 1390-1398.	3.0	6
54	Phase-based registration of cardiac tagged MR images using anatomical deformation model. , 2016, , .		2

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55	Sparse regularization methods in ultrafast ultrasound imaging. , 2016, , .		1
56	Metabolic modeling of <i>C. sorokiniana</i> diauxic heterotrophic growth. IFAC-PapersOnLine, 2016, 49, 330-335.	0.9	8
57	A Fourier-based formalism for 3D ultrafast imaging with diverging waves. , 2016, , .		0
58	Reply to the Comment on "Mathematical modeling of unicellular microalgae and cyanobacteria metabolism for biofuel production" by Baroukh et al. [Curr. Opin. Biotechnol. 2015, 33:198-205]. Current Opinion in Biotechnology, 2016, 38, 200-202.	6.6	2
59	A Sparse Reconstruction Framework for Fourier-Based Plane-Wave Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2092-2106.	3.0	32
60	The Photoinhibistat: Operating Microalgae Culture under Photoinhibition for Strain Selection**This work was supported by the French ANR Facteur 4 (ANR-12-BIME-0004) and Purple Sun (ANR-13-BIME-0004) projects.. IFAC-PapersOnLine, 2016, 49, 1068-1073.	0.9	5
61	Compressed delay-and-sum beamforming for ultrafast ultrasound imaging. , 2016, , .		21
62	Influence of temperature on <i>Chlorella vulgaris</i> growth and mortality rates in a photobioreactor. Algal Research, 2016, 18, 352-359.	4.6	92
63	dynamic Flux Balance Analysis of the Metabolism of Microalgae under a Diurnal Light Cycle. IFAC-PapersOnLine, 2016, 49, 791-796.	0.9	14
64	Optimal operation of algal ponds accounting for future meteorology. IFAC-PapersOnLine, 2016, 49, 1062-1067.	0.9	5
65	Generation of Realistic 4D Synthetic CSPAMM Tagged MR Sequences for Benchmarking Cardiac Motion Tracking Algorithms. Lecture Notes in Computer Science, 2016, , 108-117.	1.3	1
66	Extension of Fourier-Based Techniques for Ultrafast Imaging in Ultrasound With Diverging Waves. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2125-2137.	3.0	35
67	Concomitant effects of light and temperature diel variations on the growth rate and lipid production of <i>Dunaliella salina</i> . Algal Research, 2016, 14, 72-78.	4.6	28
68	Standardized Evaluation System for Left Ventricular Segmentation Algorithms in 3D Echocardiography. IEEE Transactions on Medical Imaging, 2016, 35, 967-977.	8.9	82
69	Detailed Evaluation of Five 3D Speckle Tracking Algorithms Using Synthetic Echocardiographic Recordings. IEEE Transactions on Medical Imaging, 2016, 35, 1915-1926.	8.9	40
70	Left-Atrial Segmentation From 3-D Ultrasound Using B-Spline Explicit Active Surfaces With Scale Uncoupling. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 212-221.	3.0	12
71	Dynamic coupling of photoacclimation and photoinhibition in a model of microalgae growth. Journal of Theoretical Biology, 2016, 390, 61-72.	1.7	42
72	3D harmonic phase tracking with anatomical regularization. Medical Image Analysis, 2015, 26, 70-81.	11.6	15

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73	Tracking quality in plane-wave versus conventional cardiac ultrasound: A preliminary evaluation in-silico based on a state-of-the-art simulation pipeline. , 2015, , .		3
74	Extension of Ultrasound Fourier Slice Imaging theory to sectorial acquisition. , 2015, , .		4
75	A Sparse regularization approach for ultrafast ultrasound imaging. , 2015, , .		9
76	Cardiac Chamber Volumetric Assessment Using 3D Ultrasound - A Review. Current Pharmaceutical Design, 2015, 22, 105-121.	1.9	13
77	Long-term adaptive response to high-frequency light signals in the unicellular photosynthetic eukaryote <i>Dunaliella salina</i> . Biotechnology and Bioengineering, 2015, 112, 1111-1121.	3.3	33
78	Compressed sensing reconstruction of line-wise sub-sampled 3D echographic images based on dictionary learning: an experimental study. , 2015, , .		0
79	Compressed Sensing Reconstruction of 3D Ultrasound Data Using Dictionary Learning and Line-Wise Subsampling. IEEE Transactions on Medical Imaging, 2015, 34, 2467-2477.	8.9	66
80	Generation of ultra-realistic synthetic echocardiographic sequences to facilitate standardization of deformation imaging. , 2015, , .		6
81	The role of the image phase in cardiac strain imaging. , 2015, , .		0
82	Sub-sampled Doppler ultrasound reconstruction using block sparse Bayesian learning. , 2015, , .		0
83	A Pipeline for the Generation of Realistic 3D Synthetic Echocardiographic Sequences: Methodology and Open-Access Database. IEEE Transactions on Medical Imaging, 2015, 34, 1436-1451.	8.9	91
84	Modelling the effect of temperature on phytoplankton growth across the global ocean. IFAC-PapersOnLine, 2015, 48, 228-233.	0.9	14
85	Recommendations for Life Cycle Assessment of algal fuels. Applied Energy, 2015, 154, 1089-1102.	10.1	78
86	A state of the art of metabolic networks of unicellular microalgae and cyanobacteria for biofuel production. Metabolic Engineering, 2015, 30, 49-60.	7.0	56
87	Adaptive control of light attenuation for optimizing microalgae production. Journal of Process Control, 2015, 30, 117-124.	3.3	13
88	The use of fluorescent Nile red and BODIPY for lipid measurement in microalgae. Biotechnology for Biofuels, 2015, 8, 42.	6.2	280
89	Modelling of Microalgae Culture Systems with Applications to Control and Optimization. Advances in Biochemical Engineering/Biotechnology, 2015, 153, 59-87.	1.1	36
90	Mathematical modeling of unicellular microalgae and cyanobacteria metabolism for biofuel production. Current Opinion in Biotechnology, 2015, 33, 198-205.	6.6	45

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91	Production of a methyl ester from the microalgae <i>Nannochloropsis</i> grown in raceways on the French west coast. <i>Fuel</i> , 2015, 153, 640-649.	6.4	13
92	Instrumentation and control of anaerobic digestion processes: a review and some research challenges. <i>Reviews in Environmental Science and Biotechnology</i> , 2015, 14, 615-648.	8.1	118
93	Competition between phytoplankton and bacteria: exclusion and coexistence. <i>Journal of Mathematical Biology</i> , 2015, 70, 959-1006.	1.9	14
94	Ultrasound Fourier slice imaging: a novel approach for ultrafast imaging technique. , 2014, , .		14
95	Phytoplankton plasticity drives large variability in carbon fixation efficiency. <i>Geophysical Research Letters</i> , 2014, 41, 8994-9000.	4.0	13
96	A level-set approach for tracking objects in image sequences using a level conservation constraint: Application to cardiac sequences. , 2014, , .		0
97	Compressed sensing reconstruction of 3D ultrasound data using dictionary learning. , 2014, , .		5
98	Elastic registration vs. block matching for quantification of cardiac function with 3D ultrasound: Initial results of a direct comparison in silico based on a new evaluation pipeline. , 2014, , .		3
99	ISS interval observers for nonlinear systems transformed into triangular systems. <i>International Journal of Robust and Nonlinear Control</i> , 2014, 24, 1241-1261.	3.7	20
100	Speckle decorrelation of motion in Ultrasound Fourier images. , 2014, , .		0
101	Interval observer with near optimal adaptation dynamics. Application to the estimation of lipid quota in microalgae. <i>International Journal of Robust and Nonlinear Control</i> , 2014, 24, 1142-1157.	3.7	8
102	Whole myocardium tracking in 2D-echocardiography in multiple orientations using a motion constrained level-set. <i>Medical Image Analysis</i> , 2014, 18, 500-514.	11.6	17
103	The effect of photosynthesis time scales on microalgae productivity. <i>Bioprocess and Biosystems Engineering</i> , 2014, 37, 17-25.	3.4	25
104	Life-Cycle Assessment of Microalgal-Based Biofuels. , 2014, , 287-312.		15
105	Estimation of neutral lipid and carbohydrate quotas in microalgae using adaptive interval observers. <i>Bioprocess and Biosystems Engineering</i> , 2014, 37, 51-61.	3.4	15
106	Optimal strategies for biomass productivity maximization in a photobioreactor using natural light. <i>Automatica</i> , 2014, 50, 359-368.	5.0	38
107	Semi-automatic left-atrial segmentation from volumetric ultrasound using B-spline explicit active surfaces. , 2014, , .		0
108	Modelling the dynamics of carbon and nitrogen metabolism in the unicellular diazotrophic cyanobacterium <i>Crocospaera watsonii</i> WH8501, under variable light regimes. <i>Ecological Modelling</i> , 2014, 291, 121-133.	2.5	10

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109	Biodiesel from microalgae – Life cycle assessment and recommendations for potential improvements. Renewable Energy, 2014, 71, 525-533.	8.9	129
110	Fast automatic myocardial segmentation in 4D cine CMR datasets. Medical Image Analysis, 2014, 18, 1115-1131.	11.6	126
111	A New Technique for the Estimation of Cardiac Motion in Echocardiography Based on Transverse Oscillations: A Preliminary Evaluation In Silico and a Feasibility Demonstration In Vivo. IEEE Transactions on Medical Imaging, 2014, 33, 1148-1162.	8.9	30
112	Real-time 3D interactive segmentation of echocardiographic data through user-based deformation of B-spline explicit active surfaces. Computerized Medical Imaging and Graphics, 2014, 38, 57-67.	5.8	17
113	Getting the most out of it: Optimal experiments for parameter estimation of microalgae growth models. Journal of Process Control, 2014, 24, 991-1001.	3.3	27
114	DRUM: A New Framework for Metabolic Modeling under Non-Balanced Growth. Application to the Carbon Metabolism of Unicellular Microalgae. PLoS ONE, 2014, 9, e104499.	2.5	59
115	Challenge on Endocardial Three-dimensional Ultrasound Segmentation (CETUS). , 2014, , .		7
116	Fast Tracking of the Left Ventricle Using Global Anatomical Affine Optical Flow and Local Recursive Block Matching. , 2014, , .		13
117	Temperature effect on microalgae: a crucial factor for outdoor production. Reviews in Environmental Science and Biotechnology, 2013, 12, 153-164.	8.1	332
118	Effect of ionic condensation and interactions between humic substances on their mobility: An experimental and simulation study. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 436, 408-416.	4.7	6
119	Fast Left Ventricle Tracking in 3D Echocardiographic Data Using Anatomical Affine Optical Flow. Lecture Notes in Computer Science, 2013, , 191-199.	1.3	9
120	Fast Fully Automatic Segmentation of the Myocardium in 2D Cine MR Images. Lecture Notes in Computer Science, 2013, , 71-79.	1.3	5
121	Blood Velocity Estimation Using Compressive Sensing. IEEE Transactions on Medical Imaging, 2013, 32, 1979-1988.	8.9	16
122	3D Strain Assessment in Ultrasound (Straus): A Synthetic Comparison of Five Tracking Methodologies. IEEE Transactions on Medical Imaging, 2013, 32, 1632-1646.	8.9	54
123	Myocardial Motion Estimation From Medical Images Using the Monogenic Signal. IEEE Transactions on Image Processing, 2013, 22, 1084-1095.	9.8	72
124	Effect of gaseous cement industry effluents on four species of microalgae. Bioresource Technology, 2013, 143, 353-359.	9.6	22
125	Optimizing microalgal production in raceway systems. Biotechnology Progress, 2013, 29, 543-552.	2.6	32
126	Medical ultrasound image reconstruction using distributed compressive sampling. , 2013, , .		14



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127	Fast and Fully Automatic 3-D Echocardiographic Segmentation Using B-Spline Explicit Active Surfaces: Feasibility Study and Validation in a Clinical Setting. <i>Ultrasound in Medicine and Biology</i> , 2013, 39, 89-101.	1.5	58
128	Reducing the Anaerobic Digestion Model No. 1 for its application to an industrial wastewater treatment plant treating winery effluent wastewater. <i>Bioresource Technology</i> , 2013, 132, 244-253.	9.6	31
129	Quantification of left ventricular volume and global function using a fast automated segmentation tool: validation in a clinical setting. <i>International Journal of Cardiovascular Imaging</i> , 2013, 29, 309-316.	1.5	19
130	Screening and selection of growth-promoting bacteria for <i>Dunaliella</i> cultures. <i>Algal Research</i> , 2013, 2, 212-222.	4.6	111
131	Phytoplankton growth formulation in marine ecosystem models: Should we take into account photo-acclimation and variable stoichiometry in oligotrophic areas?. <i>Journal of Marine Systems</i> , 2013, 125, 29-40.	2.1	38
132	Cell cycle implication on nitrogen acquisition and synchronization in <i>Thalassiosira weissflogii</i> (Bacillariophyceae). <i>Journal of Phycology</i> , 2013, 49, 371-380.	2.3	4
133	A Virtual Imaging Platform for Multi-Modality Medical Image Simulation. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 110-118.	8.9	92
134	A 2D model for hydrodynamics and biology coupling applied to algae growth simulations. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , 2013, 47, 1387-1412.	1.9	14
135	Hybrid energy approach for real-time b-spline explicit active tracking of surfaces (heartBEATS). , 2013, , .		2
136	Multiview myocardial tracking in echocardiographic 2D sequences using shape and motion constrained level-set. , 2013, , .		3
137	Compressive sensing ultrasound imaging using overcomplete dictionaries. , 2013, , .		6
138	Towards online real-time strain estimation in volumetric us data: Feasibility study and initial clinical validation. , 2013, , .		0
139	A new framework for metabolic modeling under non-balanced growth. Application to carbon metabolism of unicellular microalgae. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 107-112.	0.4	2
140	Adaptive control for optimizing microalgae production. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 297-302.	0.4	5
141	Driving Species Competition in a Light-limited Chemostat. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 175-180.	0.4	5
142	Modelling light-dark regime influence on the carbon-nitrogen metabolism in a unicellular diazotrophic cyanobacterium. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 187-192.	0.4	1
143	Design of Optimal Experiments for Parameter Estimation of Microalgae Growth Models. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 315-320.	0.4	1
144	Monogenic Phase Based Optical Flow Computation for Myocardial Motion Analysis in 3D Echocardiography. <i>Lecture Notes in Computer Science</i> , 2013, , 159-168.	1.3	18

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145	Interaction between time scales in microalgae based processes. , 2012, , .		1
146	Adaptative interval observer with application to the estimation of biofuel production by microalgae. , 2012, , .		0
147	Compressive sensing in medical ultrasound. , 2012, , .		43
148	Automated segmentation of a motion mask to preserve sliding motion in deformable registration of thoracic CT. Medical Physics, 2012, 39, 1006-1015.	3.0	67
149	Exponentially Stable Interval Observers for Linear Systems with Delay. SIAM Journal on Control and Optimization, 2012, 50, 286-305.	2.1	43
150	Validation of a simple model accounting for light and temperature effect on microalgal growth. Bioresource Technology, 2012, 123, 520-527.	9.6	224
151	Solutions of Alkylammonium and Bulky Anions: Description of Osmotic Coefficients within the Binding Mean Spherical Approximation. Industrial & Engineering Chemistry Research, 2012, 51, 9661-9668.	3.7	7
152	Construction of ISS interval observers for triangular systems. , 2012, , .		1
153	Simulation of realistic echocardiographic sequences for ground-truth validation of motion estimation. , 2012, , .		20
154	Influence of CO <sub>2</sub> and nitrogen limitation on the coccolith volume of <i>Emiliania huxleyi</i> (Haptophyta). Biogeosciences, 2012, 9, 4155-4167.	3.3	40
155	NEUTRAL LIPID AND CARBOHYDRATE PRODUCTIVITIES AS A RESPONSE TO NITROGEN STATUS IN <i>ISOCHRYSIS</i> SP. (T&ISO; HAPTOPHYCEAE): STARVATION <sup>1</sup>. Journal of Phycology, 2012, 48, 647-656.	2.3	52
156	DIEL VARIATIONS OF CARBOHYDRATES AND NEUTRAL LIPIDS IN NITROGEN&SUFFICIENT AND NITROGEN&STARVED CYCLOSTAT CULTURES OF <i>ISOCHRYSIS</i> SP.<sup>1</sup>. Journal of Phycology, 2012, 48, 966-975.	2.3	59
157	Detection of the whole myocardium in 2D-echocardiography for multiple orientations using a geometrically constrained level-set. Medical Image Analysis, 2012, 16, 386-401.	11.6	62
158	B-Spline Explicit Active Surfaces: An Efficient Framework for Real-Time 3-D Region-Based Segmentation. IEEE Transactions on Image Processing, 2012, 21, 241-251.	9.8	107
159	Three&reaction model for the anaerobic digestion of microalgae. Biotechnology and Bioengineering, 2012, 109, 415-425.	3.3	34
160	Estimation of lipid accumulation in microalgae with dynamic interval observers. , 2011, , .		1
161	A restoration framework for ultrasonic tissue characterization. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2344-2360.	3.0	29
162	A Dynamic Model for Anaerobic Digestion of Microalgae*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 5034-5039.	0.4	5

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163	Modelling microalgae growth in nitrogen limited photobioreactor for estimating biomass, carbohydrate and neutral lipid productivities. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10591-10596.	0.4	21
164	Anaerobic Digestion of Microalgae: Identification for Optimization and Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 5052-5057.	0.4	1
165	An expectation maximization framework for an improved ultrasound-based tissue characterization. , 2011, , .		1
166	Hurdles and challenges for modelling and control of microalgae for CO2 mitigation and biofuel production. Journal of Process Control, 2011, 21, 1378-1389.	3.3	273
167	Modeling anaerobic digestion of microalgae using ADM1. Bioresource Technology, 2011, 102, 6823-6829.	9.6	69
168	Modelling neutral lipid production by the microalga Isochrysis aff. galbana under nitrogen limitation. Bioresource Technology, 2011, 102, 142-149.	9.6	141
169	Description of partition equilibria for uranyl nitrate, nitric acid and water extracted by tributyl phosphate in dodecane. Hydrometallurgy, 2011, 109, 97-105.	4.3	29
170	Using a geometric formulation of annular-like shape priors for constraining variational level-sets. Pattern Recognition Letters, 2011, 32, 1240-1249.	4.2	12
171	Interval observers for linear time-invariant systems with disturbances. Automatica, 2011, 47, 140-147.	5.0	365
172	Multiview myocardial segmentation in echocardiographic images using a piecewise parametric shape prior. , 2011, , .		1
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