PANAGIOTIS K. SIOGKAS

Mechanical & Aeronautical Engineer

PhD in Biomedical Engineering

PROFILE

Experienced Senior Researcher with a demonstrated history of working in the research industry. Skilled in Research, 3D Reconstruction, Modeling and Simulation and Computational Fluid Dynamics. Strong research professional with a Doctor of Philosophy - PhD focused in Bioengineering and Biomedical Engineering from the University of Ioannina.

CONTACT

PHONE:
+306945382624

WEBSITE:
linkedin.com/in/panagiotis-siogkas-60665b155

EMAIL:
psiogkas4454@gmail.com

EDUCATION

Dept. of Mechanical and Aeronautical Engineering, University of Patras, Greece
2001 - 2009
Specialization sector: **Applied Mechanics, MEng**

Diploma Degree: **7.27/10**

Diploma Thesis: *"Propagation of acoustic transmission signals on constructions: Numerical Simulation"*
Dept. of Material Science Engineering, University of Ioannina, Greece
2009 - 2018
PhD in Biomedical Engineering with thesis title: "Blood Flow Modeling in Arteries with Deformable Walls"

WORK EXPERIENCE

[Foundation for Research and Technology – Hellas] - Researcher
1/8/2009-31/3/2010 & 1/2/2012-30/4/2012
ARTreat – Multi-level patient-specific artery and atherogenesis model for outcome prediction, decision support treatment, and virtual hand-on training (FP7-ICT Project ID: 224297).

[Foundation for Research and Technology – Hellas] - Researcher
1/7/2010-31/12/2010 & 1/4/2011-30/6/2011
CHRONIOUS- An Open, Ubiquitous and Adaptive Chronic Disease Management Platform for COPD and Renal Insufficiency (FP7-ICT Project ID: 216461)

[University of Ioannina] - Researcher
1/12/2012-31/10/2014
"THESSALY- MAINLAND GREECE AND EPIRUS-2007-2013" of the National Strategic Reference Framework (NSRF 2007-2013) entitled: «Development of a Software based on Image Processing and Wall Shear Stress Calculation for the optimal Assessment and the Invasive Treatment of Coronary Artery Stenosis (MIS Code: 348133)»

[University of Ioannina] - Researcher
1/11/2014-30/11/2015
«Ε.Π. ΨΗΦΙΑΚΗ ΣΥΓΚΛΙΣΗ ΕΣΠΑ 2007-2013» entitled: «Ολοκληρωμένες Πληροφοριακές Υποδομές και Υπηρεσίες για τη Διαχείριση και Αξιολόγηση της Τεχνολογίας Υγείας»

[Foundation for Research and Technology – Hellas]–Researcher
1/9/2015-30/9/2015
HEARTEN - A co-operative mHealth environment targeting adherence and management of patients suffering from Heart Failure, (H2020-EU.3.1.4., Project ID: 643694)

[Foundation for Research and Technology – Hellas]–Researcher
1/1/2016-31/3/2018
SMARTool - Simulation Modeling of coronary ARTery disease: a tool for clinical decision support (Project ID: 689068).

Foundation for Research and Technology – Hellas]–Senior Researcher
1/5/2018-30/6/2019
SMARTool - Simulation Modeling of coronary ARTery disease: a tool for clinical decision support (Project ID: 689068).

**[University of Ioannina] – Senior Researcher**
1/4/2019-30/6/2020
TAXINOMISIS – A multidisciplinary approach for the stratification of patients with carotid artery disease (Project ID: 755320).

[Ionian University] – Senior Researcher
1/4/2020-4/6/2021
Αξιολόγηση της στεφανιαίας αθηροσκλήρωσης: μια νέα, ολοκληρωμένη, ανατομολειτουργική, μορφολογική και βιομηχανική προσέγγιση, Δια Βίου Μάθηση ΕΣΠΑ 2014-2020, (Κ.Ε. 80471)

SKILLS
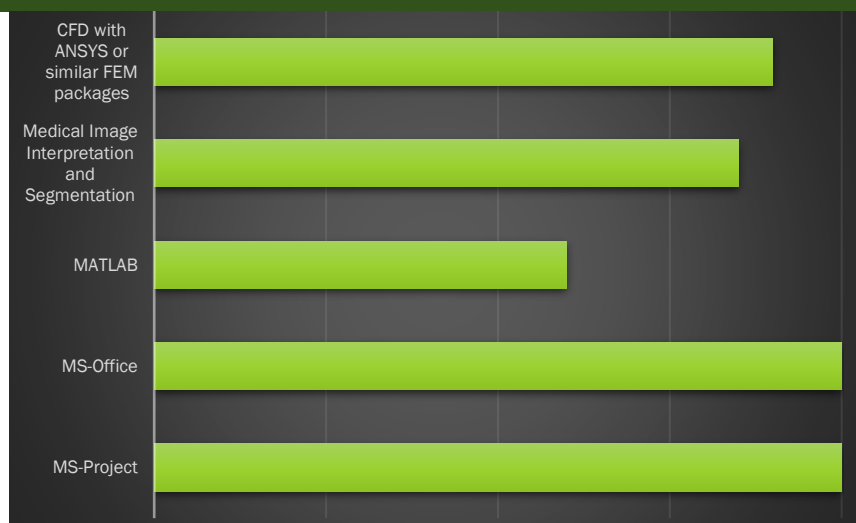
Technical Chamber of Greece (T.E.E.): Member since June 2009

Foreign Languages:

1. **English: Excellent** Knowledge (Cambridge Proficiency Certificate)

2. **Italian: Excellent** Knowledge (PLIDA C2 Diploma- Società Dante Alighieri)

Scopus stats: 53 documents, h-index=11

PUBLICATIONS IN PEER REVIEWED JOURNALS

1. *Siogkas, K., Panagiotis;* Sakellarios, I., Antonis; Exarchos, P., Themis; Stefanou, Kostas; Fotiadis, I., Dimitrios; Naka, Katerina; Michalis, Lampros; Filipovic, Nenad; Parodi, Oberdan, **Blood Flow in Arterial Segments: Rigid vs. Deformable Walls Simulations,** *Journal of the Serbian Society for Computational Mechanics, Vol. 5, No. 1, pp. 69-77, 2011.*

2. **P.Siogkas**, A.I.Sakellarios, T.Exarchos, L.Athanasiou, E.Karvounis, K.Stefanou, E.Fotiou, D.I.Fotiadis, K.K.Naka, L.K.Michalis, N.Filipovic, O.Parodi, "**Multi-level patient-specific artery and atherogenesis models**", *IEEE Transactions on Biomedical Engineering, Special Issue Multi-Scale Modelling and Analysis for Computational Biology and Medicine, 58 (12 PART 2), 5985488, pp. 3464-3468, 2011*

3. **Panagiotis Siogkas**, Michail Papafaklis, Antonis Sakellarios, Kostas Stefanou, Christos Bourantas, Lambros Athanasiou, Themis P. Exarchos, Katerina K. Naka, Lampros Michalis, Oberdan Parodi, and Dimitrios I. Fotiadis, "**Patient-specific Simulation of Coronary Artery Pressure Measurements: An In Vivo Three-dimensional Validation Study in Humans**", *BioMed Research International, 01/2015; vol. 2015, pp. 1-11*

4. **Panagiotis K. Siogkas**, Kostas A. Stefanou, Lambros S. Athanasiou, Michail I. Papafaklis, Lampros K. Michalis, and Dimitrios I. Fotiadis, "**Art Care: A Multi-Modality Coronary 3D Reconstruction and Hemodynamic Status Assessment Software**", *Technology and Health Care, 2017 Oct 13. doi: 10.3233/THC-170881*

5. **Panagiotis K. Siogkas**, Michail I. Papafaklis, Lampros Lakkas, Themis P. Exarchos, Dimitri Karmpaliotis, Ziad A. Ali, Gualtiero Pelosi, Oberdan Parodi, Christos S. Katsouras, Dimitrios I. Fotiadis and Lampros K. Michalis, "**Virtual Functional Assessment of Coronary Stenoses Using Intravascular Ultrasound Imaging: A Proof-of-Concept Pilot Study**", *Heart Lung and Circulation, 2018 Mar 2. pii: S1443-9506(18)30074-X. doi: 10.1016/j.hlc.2018.02.011*

6. **Panagiotis K. Siogkas**, Constantinos D. Anagnostopoulos, Riccardo Liga, Themis P. Exarchos, Antonis I. Sakellarios, George Rigas, Arthur J.H.A. Scholte, M.I. Papafaklis, Dimitra Loggitsi, Gualtiero Pelosi, Oberdan Parodi, Lampros K. Michalis, Juhani Knuuti, Danilo Neglia, Dimitrios I. Fotiadis, "**Noninvasive CT-based hemodynamic assessment of coronary lesions derived from fast computational analysis: a comparison against fractional flow reserve**, *European Radiology, 2018 Oct 15. doi: 10.1007/s00330-018-5781-8*

7. *C.D.Anagnostopoulos*, **P.K. Siogkas**, R. Liga, G. Benetos, T. Maaniitty, A.I. Sakellarios, I. Koutagiar, I. Karakitsios, M.I.

Papafaklis, A.J.H.A. Scholte, L.K. Michalis, O. Gaemperli, P.A. Kaufmann, G. Pelosi, O. Parodi, J. Knuuti, D.I. Fotiadis and D. Neglia, "Characterization of functionally significant coronary artery disease by a coronary computed tomography angiography (CCTA) based index: a comparison with Positron Emission Tomography (PET)", *European Heart Journal-Cardiovascular Imaging, 2019 Jan 9. doi: 10.1093/ehjci/jey199*

8. A.I.Sakellarios, K.Stefanou, P.Siogkas, V.D.Tsakanikas, C.V.Bourantas, L.Athanasiou, T.Exarchis, E.Fotiou, K.Naka, M.I.Papafaklis, A.J.Patterson, V.El.Young, J.H.Gillard, L.K.Michalis, D.I.Fotiadis, "Novel methodology for 3D reconstruction of carotid arteries and plaque characterization based upon magnetic resonance imaging carotid angiography data", *Magnetic Resonance Imaging Journal, 30 (8), pp. 1068-1082, 2012*

9. P.K. Siogkas, L. Lakkas, A.I. Sakellarios, George Rigas, S. Kyriakidis, K.A. Stefanou, C.D. Anagnostopoulos, S. Rocchiccioli, G. Pelosi, O. Parodi, D. Neglia, L.K. Michalis, and D.I. Fotiadis, "SmartFFR: A new functional assessment index of coronary stenosis: comparison with invasive FFR data", *Heart, Lung and Circulation (submitted).*

10. T.P. Exarchos, K.Stefanou, P.Siogkas, A.Sakelarios, D.I.Fotiadis, K.Naka, L.Michalis, Lampros, N.Filipovic, O.Parodi, "ARTool: A Platform for the development of multi-level patient-specific artery and atherogenesis models", *Journal of Internet Research, Special Issue on Computational Bioengineering (accepted)*

11. Oberdan Parodi, Themis Exarchos, Paolo Marraccini, Federico Vozzi, Zarko Milosevic, Dalibor Nikolic, Antonis Sakellarios, Panagiotis Siogkas, Nenad Filipovic , Dimitris Fotiadis, "Patient-specific prediction of coronary plaque growth from CTA angiography: a multiscale model for plaque formation and progression", *IEEE Transaction on Information Technology in Biomedicine 16 (5), 6208879, pp. 952-965, 2012*

12. Filipovic, N., Radovic, M., Isailovic, V., Milosevic, Z., Nikolic, D., Saveljic, I., Milosevic, M. Petrovic, D., Obradovic, M, Krsmanovic, D., Themis, E., Sakellarios, A., Siogkas, P., Marraccini, P, Vozzi, F Meunier, N. Teng, Z., Fotiadis, D., Parodi, O, Kojic, M., "Plaque formation and stent deployment with heating thermal effects in arteries", *Journal of the Serbian Society for Computational Mechanics, 6 (1), pp. 11-28, 2012*

13. Sakellarios, A.I., Papafaklis, M.I., Siogkas, P., Athanasiou, L.S., Exarchos, T.P., Stefanou, K., Bourantas, C.V., Naka, K.K., Michalis, L.K., Parodi, O., Fotiadis, D.I. "Patient-specific computational modeling of subendothelial LDL accumulation in a stenosed right coronary artery: Effect of hemodynamic and biological factors", *American Journal of Physiology - Heart and Circulatory Physiology ,304 (11), pp. H1455-H1470, 2013*

14. Bourantas, C.V., Papafaklis, M.I., Athanasiou, L., Kalatzis, F.G., Naka, K.K., Siogkas, P.K., Takahashi, S., Saito, S., Fotiadis, D.I., Feldman, C.L., Stone, P.H., Michalis, L.K. "A new methodology for accurate 3-dimensional coronary artery reconstruction using

routine intravascular ultrasound and angiographic data: Implications for widespread assessment of endothelial shear stress in humans", *EuroIntervention, 9 (5), pp. 582-593, 2013*

15. Athanasiou, L.S., Karvelis, P.S., Sakellarios, A.I., Exarchos, T.P., **Siogkas, P.K.**, Tsakanikas, V.D., Naka, K.K., Bourantas, C.V., Papafaklis, M.I., Koutsouri, G., Michalis, L.K., Parodi, O., Fotiadis, D.I. "**A hybrid plaque characterization method using intravascular ultrasound images**", *Technology and Health Care, 21 (3), pp. 199-216, 2013*

16. Athanasiou, L.S., Bourantas, C.V., Rigas, G., Sakellarios, A.I., Exarchos, T.P., **Siogkas, P.K.**, Ricciardi, A., Naka, K.K., Papafaklis, M.I., Michalis, L.K., Prati, F., Fotiadis, D.I. "**Methodology for fully automated segmentation and plaque characterization in intracoronary optical coherence tomography images**" *Journal of Biomedical Optics, 19 (2), 026009, 2014*

17. Athanasiou, L.S., Rigas, G.A., Sakellarios, A.I., Exarchos, T.P., **Siogkas, P.K.**, Naka, K.K., Panetta, D., Pelosi, G., Vozzi, F., Michalis, L.K., Parodi, O., Fotiadis, D.I. "**Computerized methodology for micro-CT and histological data inflation using an IVUS based translation map**" *Computers in Biology and Medicine, Vol. 65, pp. 168-176, 2015*

18. Athanasiou, L., Sakellarios, A.I., Bourantas, C.V. , Tsirka, G., **Siogkas, P.**, Exarchos, T.P., Naka, K.K., Michalis, L.K., Fotiadis, D.I. " **Currently available methodologies for the processing of intravascular ultrasound and optical coherence tomography images**" *Expert Review of Cardiovascular Therapy, Vol. 12(7), pp. 885-900, 2014*

19. Athanasiou, L., Rigas, G., Sakellarios, A.I., Exarchos, T.P., **Siogkas, P.K.**, Bourantas, C.V., Garcia-Garcia, H.M., Lemos, P.A., Falcao, B.A., Michalis, L.K., Parodi, O., Vozzi, F., Fotiadis, D.I. "**Three-dimensional reconstruction of coronary arteries and plaque morphology using CT angiography - comparison and registration with IVUS**" *BMC Medical Imaging, Vol. 16(1), 2016*

20. Michail I. Papafaklis, Michail C. Mavrogiannis, **Panagiotis K. Siogkas**, Lampros S. Lakkas, Christos S. Katsouras, Dimitrios I. Fotiadis, Lampros K. Michalis. "**Functional Assessment of Lesion Severity Without Using the Pressure Wire: Coronary Imaging and Blood Flow Simulation**" *Expert Review of Cardiovascular Therapy*

21. Vassiliki I. Kigka, George Rigas, Antonis Sakellarios, **Siogkas Panagiotis**, Ioannis O. Andrikos, Themis P. Exarchos, Dimitra Loggitsi, Constantinos D. Anagnostopoulos, Lampros K. Michalis, Danilo Neglia, Gualtriero Pelosi, Oberdan Parodi, Dimitrios I. Fotiadis. "**3D Reconstruction of Coronary Arteries and Atherosclerotic Plaques based on Computed Tomography Angiography Images**" *Biomedical Signal Processing & Control*

22. Vassiliki I. Kigka; Antonis I. Sakellarios; Savvas Kyriakidis; George Rigas; Lambros Athanasiou; Panagiotis Siogkas; Panagiota Tsompou; Dimitra Loggitsi; Ronny Buechel; Gualtiero Pelosi; Pedro A. Lemos; Lampros K. Michalis and Dimitrios I. Fotiadis, "**A three-dimensional quantification of calcified and non-calcified plaques**

in coronary arteries based on computed tomography coronary angiography images: comparison with expert's annotations and virtual histology intravascular ultrasound", *Computers in Biology and Medicine*

23. Antonis Sakellarios, Joao Correia, Savvas Kyriakidis, Elena Georga,Nikolaos Tachos, **Panagiotis Siogkas**, Francisco Sans, Paolo Stofella, Valiani Massimiliano, Alberto Clemente, Silvia Rocchiccioli, Gualtiero Pelosi, Nenad Filipovic & Dimitrios I. Fotiadis, "A cloud-based platform for the non-invasive management of coronary artery disease", *Enterprise Information Systems, DOI: 10.1080/17517575.2020.1746975, 2020.*

PUBLICATIONS IN PEER REVIEWED CONFERENCE PROCEEDINGS

1. **Panagiotis K. Siogkas**, Antonis I. Sakellarios, Kostas A. Stefanou, Themis P. Exarchos, Lambros Athanasiou, Konstantinos G. Siogas, Lampros K. Michalis, Katerina K. Naka, Christos V. Bourantas, Catrin Bludszuweit-Philipp and Dimitrios I. Fotiadis, **Exploring the Effect of Arterial Geometry in a Realistic 3D Coronary Arterial Model,** *10th International Workshop on Biomedical Engineering, October 2011, Kos, Greece.*

2. **P. K. Siogkas**, A. I. Sakellarios, K. A. Stefanou, V. D. Tsakanikas, T. P. Exarchos, L. K. Michalis, K. K. Naka, C. Bludszuweit-Philipp and D. I. Fotiadis, **Quantification of the Effect of Percutaneous Coronary Angioplasty on a Stenosed Right Coronary Artery**, *10th IEEE International Conference on Information Technology and Applications in Biomedicine, November 2010, Corfu, Greece.*

3. **P. K. Siogkas**, A. I. Sakellarios, K. A. Stefanou, T. P. Exarchos, V. D. Tsakanikas, L. K. Michalis, K. K. Naka, M. I. Papafaklis, C. V. Bourantas and D. I. Fotiadis, **Blood flow in coronary arteries with deformable walls,** *9th HSTAM International Congress on mechanics, Limassol, Cyprus, 2010.*

4. Antonis I. Sakellarios, **Panagiotis K. Siogkas**, Vasilis D. Tsakanikas, Kostas A. Stefanou, Lampros K. Michalis, Dimitrios I. Fotiadis, **Simulation of the Effect of Tachycardia on Atherosclerotic Plaque Development Based on the LDL Transport in Coronary Arteries,** *CinC 2010, September 2010, Belfast, Ireland.*

5. Antonis I. Sakellarios, **Panagiotis K. Siogkas**, Vasilis D. Tsakanikas, Katerina K. Naka, Lampros K. Michalis, Dimitrios I. Fotiadis, **Computational model of atherosclerotic plaque formation in 3D coronary arterial tree of realistic geometry** *ELEMBIO 2010, Ioannina, 4 - 6 June 2010*

6. A.I.Sakellarios, T.Exarchos, **P.Siogkas**, K.Stefanou,, C.V.Bourantas, E.Fotiou, K.K.Naka, L.K.Michalis, D.Koutsouris, D.I.Fotiadis, "**Influence of arterial geometry and stenosis on LDL accumulation in arteries**", *7th GRACM International Congress on Computational Mechanics (in press)*

7. A. I. Sakellarios, **P. Siogkas**, T. P. Exarchos, K. Stefanou, C. V. Bourantas, K. K. Naka, D. I. Fotiadis, L. K. Michalis, **Computational Blood Flow Modeling Validation using MRI Carotid Angiography**, *32ο Πανελλήνιο Καρδιολογικό Συνέδριο, Οκτώβριος 2011, Θεσσαλονίκη, Ελλάδα.*

8. L. Athanasiou, C. Bourantas, **P. Siogkas**, A. Sakellarios, T. Exarchos, K. Naka, M. Papafakls, F. Prati, D. Fotiadis, **3D Reconstruction of Coronary Arteries Using Frequency Domain Optical Coherence Tomography Images and Biplane Angiography**, *34th Annual International IEEE EMBS Conference, August 28 - September 1, 2012, San Diego, California, USA.*

9. T. Exarchos, A. Sakellarios, **P. Siogkas**, D. Fotiadis, Z. Milosevic, D. Nikolic, N. Filipovic, P. Maraccini, F. Vozzi, O. Parodi, "**Patient Specific Multiscale Modelling for Plaque Formation and Progression**, *34th Annual International IEEE EMBS Conference, August 28 - September 1, 2012, San Diego, California, USA.*

10. Athanasiou, L.S. , Bourantas, C.V. , **Siogkas, P.K.** , Sakellarios, A.I. , Exarchos, T.P. , Naka, K.K. , Papafaklis, M.I. , Michalis, L.K. , Prati, F. , Fotiadis, D.I. "**3D reconstruction of coronary arteries using Frequency Domain Optical Coherence Tomography images and biplane angiography**", *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, 6346508, pp. 2647-2650, 2012*

11. Exarchos, T.P. , Sakellarios, A. , **Siogkas, P.K.** , Fotiadis, D.I. , Milosevic, Z. , Nikolic, D. , Filipovic, N. , Marraccini, P., Vozzi, F., Parodi, O., "**Patient specific multiscale modelling for plaque formation and progression**", *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, 6346568, pp. 2893-2896, 2012*

12. Athanasiou, L.S. , Bourantas, C.V. , Rigas, G.A. , Exarchos, T.P. , Sakellarios, A.I. , **Siogkas, P.K.** , Papafaklis, M.I. , Naka, K.K. , Michalis, L.K , Prati, F , Fotiadis, D.I. "**Fully automated calcium detection using optical coherence tomography**" *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 6609779, pp. 1430-1433, 2013*

13. **Siogkas, P.K.** , Papafaklis, M.I. , Sakellarios, A.I. , Stefanou, K.A. , Bourantas, C.V., Athanasiou, L.M. , Bellos, C.V , Exarchos, T.P. , Naka, K.K. , Michalis, L.K. , Parodi, O., Fotiadis, D.I., "**Computational assessment of the fractional flow reserve from intravascular ultrasound and coronary angiography data: A pilot study**", *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 6610393, pp. 3885-3888, 2013*

14. Sakellarios, A.I. , **Siogkas, P.K** , Athanasiou, L.S., Exarchos, T.P., Papafaklis, M.I., Bourantas, C.V., Naka, K.K., Michalis, L.K.,

Filipovic, N., Parodi, O., Fotiadis, D.I., "Three-dimensional modeling of oxidized-LDL accumulation and HDL mass transport in a coronary artery: A proof-of-concept study for predicting the region of atherosclerotic plaque development", *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 6610550, pp. 4513-4516, 2013*

15. Sakellarios, A.I., Siogkas, P.K., Athanasiou, L.S., Exarchos, T.P., Papafaklis, M.I., Bourantas, C.V., Naka, K.K., Iliopoulou, D. Michalis, L.K., Filipovic, N., Parodi, O., Fotiadis, D.I., "Modeling atherosclerotic plaque growth: A case report based on a 3D geometry of left coronary arterial tree from computed tomography", 13th IEEE International Conference on BioInformatics and BioEngineering, IEEE BIBE 2013, 6701548, 2013

16. Panagiotis Siogkas, Antonis Sakellarios, Michail Papafaklis, Kostas Stefanou, Lambros Athanasiou, Themis P. Exarchos, Katerina Naka, Lampros Michalis, Dimitrios I. Fotiadis, "Assessing the Hemodynamic Influence between Multiple Lesions in a Realistic Right Coronary Artery Segment: a Computational Study", *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, 2014.*

17. Lambros Athanasiou, Georgios Rigas, Antonis Sakellarios, Themis P. Exarchos, Panagiotis Siogkas, Lampros Michalis, Oberdan Parodi, Federico Vozzi, Dimitrios I. Fotiadis "Three-Dimensional Reconstruction of Coronary Arteries and Plaque Morphology Using CT Angiography – Comparison and Registration Using IVUS" *Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, 2014*

18. Panagiotis Siogkas, Lambros Athanasiou, Antonis Sakellarios, Kostas A. Stefanou, Themis P. Exarchos, Michail I. Papafaklis, Katerina K. Naka, O. Parodi, Lampros K. Michalis, Dimitrios I. Fotiadis "Validation Study of a 3D-QCA Coronary Reconstruction Method Using a Hybrid IntraVascular UltraSound and Angiography Reconstruction Method and Patient-Specific Fractional Flow Reserve Data" *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, Vol. 2015, pp. 973-976, 2015.*

19. Panagiotis K. Siogkas, Constantinos D. Anagnostopoulos, Themis P. Exarchos, Riccardo Liga, Juhani Knuuti, Arthur J.H.A. Scholte, Oberdan Parodi, Lampros K. Michalis, Danilo Neglia, Dimitrios I. Fotiadis, "Computational Hemodynamic Assessment of coronary lesions from Computed Tomography Angiography. A novel approach", *European Society of Cardiology Congress 2016*

20. Panagiotis K. Siogkas, Michail I. Papafaklis, Bill D. Gogas, Habib Samady, Lampros K. Michalis and Dimitrios I. Fotiadis, "Computational Estimation of the Severity of Coronary Lesions with IntraVascular UltraSound Images: a pilot study", *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, 2016*

21. **Panagiotis K. Siogkas**, Vassiliki Kigka, George Rigas, Antonis I. Sakellarios, Themis P. Exarchos, Dimitrios I. Fotiadis "**Analysis of Coronary Computed Tomography Angiography for 3D reconstruction of arterial trees and plaque detection**" *BHI-2017 International Conference on Biomedical and Health Informatics*

22. **Panagiotis K. Siogkas**, Antonis I. Sakellarios, George Rigas, Themis P. Exarchos, Michail I. Papafaklis, Gualtiero Pelosi, Oberdan Parodi, Lampros K. Michalis, Dimitrios I. Fotiadis "**Computational Estimation of the Hemodynamic Significance of Coronary Stenoses in Arterial Branches deriving from CCTA: a proof-of-concept study**" *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS, 2017*

23. **Panagiotis K. Siogkas**, Danilo Neglia, Antonis I. Sakellarios, Riccardo Liga, Gualtiero Pelosi, M. I. Papafaklis, T. Niittymaki, Arthur J.H.A. Scholte, O. Gaemperli, P.A. Kaufmann, Oberdan Parodi, Lampros K. Michalis, Dimitrios I. Fotiadis, Juhani Knuuti, Constantinos D. Anagnostopoulos "**Characterization of functionally significant coronary artery disease by a novel coronary computed tomography angiography based index: a comparison with quantitative PET perfusion**" *European Society of Cardiology Congress 2017*

24. Panagiota I. Tsompou, **Panagiotis K. Siogkas**, Antonis I. Sakellarios, Pedro A. Lemos, Lampros K. Michalis, Dimitrios I. Fotiadis, "**Non-invasive Assessment of Coronary Stenoses and Comparison to Invasive Techniques: A Proof-of-Concept Study**" *IEEE 30th International Symposium on Computer-Based Medical Systems (CBMS), 2017*

25. Antonis Sakellarios, Nikolaos Tachos, Eleni Georga, George Rigas, Vassiliki Kigka, **Panagiotis Siogkas**, Savvas Kyriakidis, Georgia Karanasiou, Panagiota Tsobou, Ioannis Andrikos, Silvia Rocchiccioli, Gualtiero Pelosi, Oberdan Parodi, Dimitrios I. Fotiadis, "**A novel concept of the management of coronary artery disease patients based on machine learning risk stratification and computational biomechanics: Preliminary results of SMARTool project**" *Proceedings of the World Congress of Medical Physics and Biomedical Engineering 2018*

26. **Panagiotis Siogkas**, Antonis Sakellarios, Lampros Michalis, Dimitrios I. Fotiadis, "**Non-invasive quantification of coronary artery disease in arterial bifurcations using CCTA and CFD: comparison to fractional flow reserve measurements**" *Proceedings of the World Congress of Medical Physics and Biomedical Engineering 2018*

27. Ioannis Andrikos, Antonis Sakellarios, **Panagiotis Siogkas**, Panagiota Tsobou, Vassiliki Kigka, Lampros Michalis, Dimitrios I. Fotiadis, "**A novel method for 3D reconstruction of coronary bifurcation using Quantitative Coronary Angiography**" *Proceedings of the World Congress of Medical Physics and Biomedical Engineering 2018*
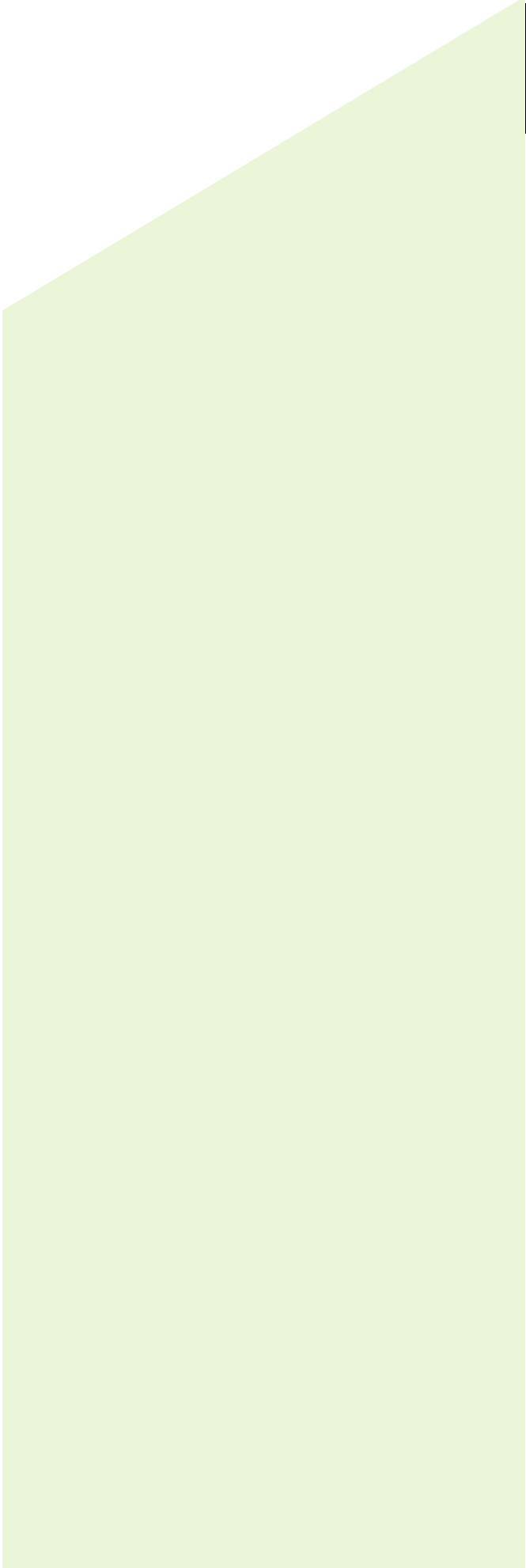
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