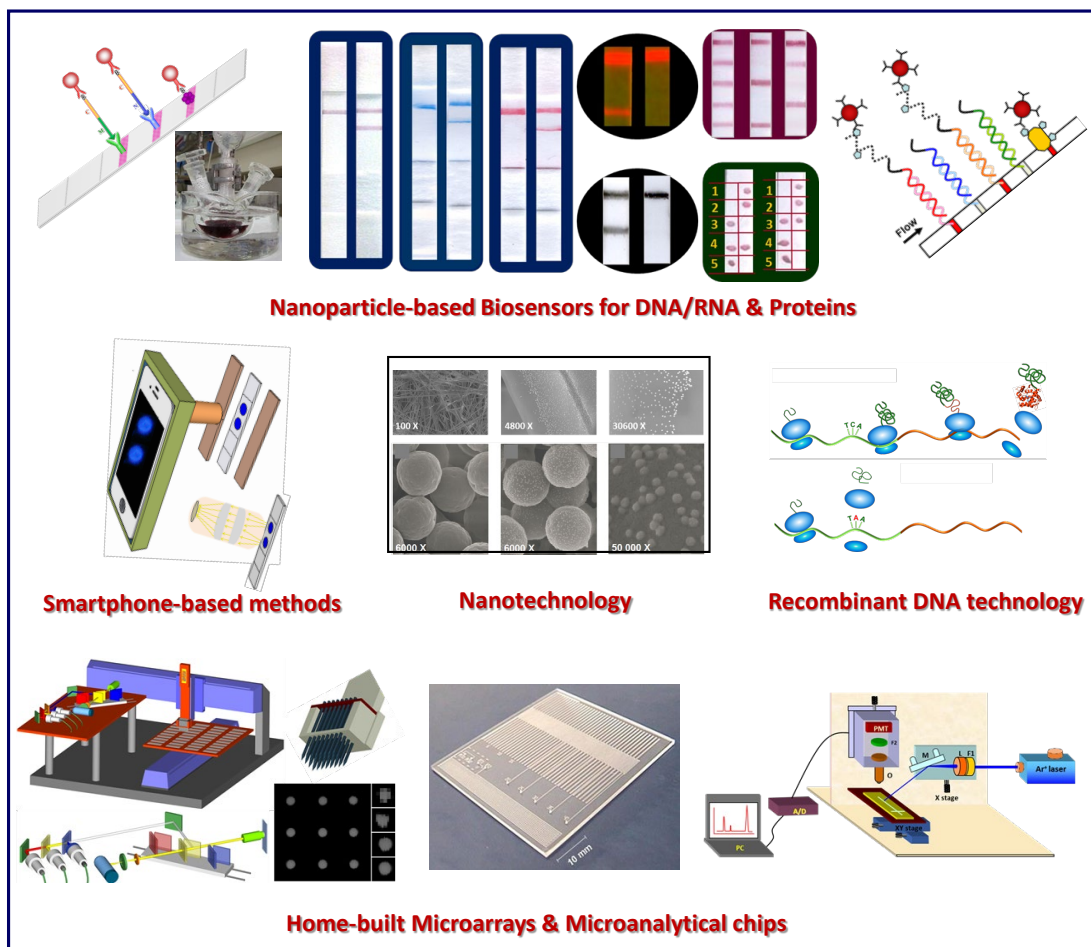


# CURRICULUM VITAE

**Theodore K. Christopoulos**

Professor, Department of Chemistry, University of Patras, Patras, Greece  
&  
Collaborating faculty member, FORTH/ICEHT



**Nanoparticle-based Biosensors for DNA/RNA & Proteins**

**Smartphone-based methods**

**Nanotechnology**

**Recombinant DNA technology**

**Home-built Microarrays & Microanalytical chips**

The collage includes: a diagram of a biosensor chip with nanoparticles; a photograph of a laboratory flask; three test tubes with colored bands; a circular diagram with colored segments; a 5x5 grid with numbers; a diagram of a DNA/RNA/protein complex; a smartphone with a biosensor chip; SEM images of nanospheres at 100X, 4800X, 30500X, 6000X, and 50 050X magnifications; a diagram of a recombinant DNA construct; a schematic of a home-built microarray system with a laser, lens, and detector; and a photograph of a microarray chip with a 10 mm scale bar.

## CURRICULUM VITAE

### Theodore K. Christopoulos

Professor, Department of Chemistry, University of Patras, Patras, Greece  
&  
Collaborating faculty member, FORTH/ICEHT

***Date and Place of birth:*** 25-Jul-1960, Arta, Greece  
***Family status:*** Married, 4 children  
***Address:*** Department of Chemistry  
University of Patras  
Patras, Greece 26504  
***Tel.*** +30 2610-962951  
***E-mail:*** tchrist@upatras.gr

#### ***Education***

1982 BSc in Pharmacy, University of Athens, Greece (Excellent)  
1987 PhD in Chemistry, University of Athens, Greece (Excellent)  
1991 Post-Doctoral Diploma in Clinical Chemistry, University of Toronto, Canada

#### ***Employment/Occupation***

2004-present Full Professor of Analytical Chemistry, Dept. of Chemistry, University of Patras  
2000-present Collaborating Faculty Member, Institute of Chemical Engineering  
Sciences/Foundation for Research and Technology Hellas (ICE/FORTH)  
2013-2017 Member of the University Council of the University of Patras, Patras, Greece  
(since Feb. 2013)  
2011-2013 Chair, Department of Chemistry, University of Patras, Greece (Sept.  
2011 to Feb. 2013)  
1999-2003 Associate Professor, Dept. of Chemistry, University of Patras  
1999 Full Prof., Dept. of Chemistry & Biochemistry, Univ. of Windsor,  
Ontario, Canada.  
1998 Visiting Assoc. Prof., Dept. of Molecular Genetics, Harvard University, Boston,  
MA  
1996-1999 Assoc. Prof. (tenured), Dept. of Chem. & Biochem., Univ. of Windsor,  
Canada  
1992-1996 Assist. Prof., Dept. of Chem. and Biochem., Univ. of Windsor, Ontario,  
Canada  
1989-1992 Post-Doctoral Research Associate, Department of Clin. Biochemistry,  
School of Medicine, University of Toronto, Canada

### **Research Activities**

- Micro- and Nanotechnology in Modern Chemical Analysis
- Biosensors
- Microanalytical Systems
- Chemical Instrumentation. Automation of Chemical Analysis.
- Fluorescence/Time-Resolved Fluorescence, Bio(chemi)luminescence
- Biotechnology for Analytical Chemistry
- DNA, RNA and Protein Analysis
- Clinical/Molecular Diagnostics
- Food authenticity testing

### **Awards and Distinctions**

- 1985 The '*Canadian Society of Clinical Chemists Best Poster Award*'
- 1990 The '*CSCC Award to encourage research in Clinical Chemistry*'
- 1991 The '*Student Travel Grant*' from the Ontario Soc. of Clin.Chem.
- 1991 The '*Canadian Society of Clinical Chemists Best Poster Award*'
- 1991 The '*Young Investigator Award*', from the Upstate NY Section of American Association for Clinical Chemistry (AACC).
- 1992 The '*Van Slyke Society Grant Award*' from AACC.
- 1995 The '*Canadian Society of Clinical Chemists (CSCC) Best Poster Award*'
- 1995 '*Oncor Prize for the best oncology related poster presentation*' at the San Diego Conference on 'Nucleic Acids: A Decade of Discovery'.
- 1997 The “Grannis Award” for: “Excellence in Research and Scientific Publication” from the U.S.A National Academy of Clin. Biochemistry.**  
**"The award is given annually to an individual whose work is exemplary"**
- 2000 Research Award from the Empeirikeio Foundation, Athens, Greece
- 2008 *Two* Best Oral Presentation Awards at the XVI Meeting of Balkan Clinical Laboratory Federation & 7th Hellenic Congress of Clinical Chemistry, Athens
- 2009 Best Oral Presentation. *8o Hellenic Clinical Chemistry Conference*, Patras
- 2011 Selected at the top 21 achievements (finalists) from the 295 submitted to the Competition for 'Applied Research and Innovation', organized by the Hellenic Federation of Enterprizes & Eurobank (Athens, 2011)
- 2013 Selected at the top 10 achievements (finalists) from the 143 submitted to the Competition for Innovation, organized by the Hellenic Association of Pharmaceutical Companies (SFEE) (Athens).
- 2015 Poster Award, 9<sup>th</sup> International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", 20-24 September 2015, (Kalamata, Greece, 2015).
- 2019 Best Poster Presentation Award. 11<sup>th</sup> International Conference on Instrumental Methods of Analysis – Modern Trends and Applications (Ioannina, Greece 2019)
- 2019 Honorable Distinction for the originality and usefulness of the paper “Smartphone-based chemiluminometric hybridization assays and quantitative competitive polymerase chain reaction”. 17th Hellenic Conference on Clinical Chemistry, (Athens, Greece)
- 2023** The “Panagiotis Kanellopoulos” Outstanding Publication Award for the year 2022, from the University of Patras (awarded 30/01/2023) for the original research publication "*Macromolecular crowding agents enhance the sensitivity of lateral flow immunoassays*, by Christopoulou N-M, Kalogianni DP, Christopoulos TK. *Biosensors & Bioelectronics*, 2022; 218: 114737”.

*Invited speaker (the international are in bold)*

1. **Federation of Analytical Chemistry and Spectroscopy Societies (FACSS), Detroit, MI, 1993**
2. **Clinical Ligand Assay Society, Dearborn, MI, 1993.**
3. **American Association for Clinical Chemistry, Detroit, MI, 1994.**
4. **American Association for Clin. Chemistry, Molecular Pathology, Chicago, IL, 1996**
5. University of Athens, Department of Chemistry, 1996
6. University of Ioannina, Department of Medicine, 1996
7. University of Athens, Medical School, 1996
8. **Harvard Medical School, Dept. of Molecular Genetics, Boston, MA, 1997**
9. **Scripps Research Institute, La Jolla, CA, 1997**
10. **Univ. of Michigan, Dept. of Chemistry, Ann Arbor, MI, 1997**
11. **Univ. of Alberta, Dept. of Chemistry, Edmonton, Canada, 1998**
12. University of Athens, Department of Chemistry, 1998
13. **Conference on DNA Technologies in Human Disease Detection, San Diego, CA, 1998**
14. **ECOSEP I Conference (International), Patras, 1998.**
15. **University of Vienna, Medical School, 1999**
16. Hellenic Association of Clinical Chemistry, Paster Institute, Athens, 2000
17. ICE-HT/FORTH, Patra, 2000
18. Hellenic Society of Biology Conference, Athens, 2000
19. University of Patras, Department of Medicine, 2001
20. Hellenic Chemical Society Conference, 2001.
21. **Controlled Release Society/Pharmaceutical Association, Athens, 2001**
22. National Technical University of Athens, Dept. of Chemical Engineering, Athens, 2002
23. Hellenic Chemical Society Conference, Herakleion, Crete, 2002
24. University of Crete, Dept. of Biology, 2002
25. **Aegean Analytical Chemistry Days Conference (International), Lesvos, 2002**
26. Hellenic Conference of the Society of Biological Sciences, Eretria, Greece 2002
27. **International conference on ‘Mutation Detection’, Santorini, 2005.**
28. Hellenic Biotechnology Club Meeting & NanoBiotech Business Day, Athens, Greece 2005.
29. Biosciences conference, University of Patras, Greece 2005.
30. ICEHT/FORTH, Patras, Greece 2005.
31. Hellenic Conference on Food Technology and Biotechnology, Athens, 2005
32. Foundation for Research and Technology Hellas (FORTH) symposium, 2007.
33. **International Greek Biotechnology Forum, Athens, Greece 2008.**
34. National Research Council, Institute of Biological Sciences and Biotechnology, Athens, Greece 2008.
35. **International Symposium on Luminescence Spectroscopy, Bologna, Italy 2008.**
36. **International Workshop on Multianalyte Biosensing Devices, Athens, 2008**
37. **International Intensive Course and Workshop on ‘Nanomedicines-nanoparticulates for drug delivery’, Patras, Greece 2008**
38. ‘Pharmacogenomics and personalized Medicine, Athens, Greece 2009.
39. **The 11<sup>th</sup> International Symposium on Mutations in the Genome, Santorini, Greece 2011.**
40. Summer school on ‘Nanomaterials and Devices’, University of Patras, 2012
41. **5<sup>th</sup> BBBB International Conference ‘From drug discovery and formulation strategies to Pharmacokinetics and Pharmacodynamics’, Athens, Sept 2013**

42. 2<sup>nd</sup> Conference on Pharmaceutical Sciences, Patras, Greece, Oct. 2014
43. 3<sup>rd</sup> Hellenic Forum on Advanced Science Technology & Innovation. Workshop on ‘Advanced biosensing devices for biomedical and food analysis applications’, Athens, Jul. 2015
44. Foundation for Research & Technology Hellas, Institute of Chemical Engineering Sciences, Patras, Greece, Jun 2015.
45. 17<sup>th</sup> Hellenic Pharmaceutical Conference, Athens Greece Oct. 2015.
46. 17<sup>th</sup> Medicinal Chemistry Conference, Spetses Greece Aug 2016.
47. 5<sup>th</sup> Health Forum, Patras, Greece May 2017
48. **2<sup>nd</sup> NANOMED Workshop ‘Innovative Medicines for Targeted Drug Delivery and Personalized Approaches’, University of Patras and FORTH/ICE, Patras July 2019**
49. National and Kapodistrian University of Athens, Dept. of Chemistry, May 27, 2022

### ***Teaching experience***

- *University of Patras (1999-present)*  
Department of Chemistry, Undergraduate courses (1999-present):  
 ‘Instrumental Chemical Analysis-1’,  
 ‘Instrumental Chemical Analysis-2’ (Lectures and Laboratory),  
 ‘Quality Control of Chemical Analyses’ (Lectures)  
 ‘Analytical Chemistry-1/Qualitative Analysis’ (Lectures and Laboratory)  
 ‘Analytical Chemistry-2/Quantitative Analysis’ (Laboratory)  
Department of Biology, Undergraduate courses (2011-present):  
 ‘Instrumental Methods for Biomolecular Analysis’  
Department of Chemistry, Graduate courses (2010-present):  
 ‘Micro/Nanotechnology-Chemical sensors’ (I cover the full graduate course)  
 ‘Chemical Biology’. I offer two lectures, 2-hours each
- *University of Windsor, Ontario, Canada (1992-1999)*  
Undergraduate courses:  
 ‘Principles of Instrumental Analysis’  
 ‘Intermediary Metabolism’  
 ‘General Chemistry’  
Graduate courses:  
 ‘Advanced Bioanalytical Topics’  
 ‘Clinical Chemistry I’  
 ‘Clinical Biochemistry I’  
 ‘Instrumental Analysis in Clinical Chemistry’.

### ***PhD Theses Supervisor***

17 PhD theses have been completed under my supervision (7 in Canada and 10 in Greece). One PhD thesis is in progress.

### ***MSc Theses Supervisor***

24 MSc theses have been completed under my supervision (2 in Canada and 22 in Greece). 3 MSc theses are in progress.

### ***Supervisor of 4<sup>th</sup> Year Projects***

55 undergraduate students have completed their 4<sup>th</sup> year experimental project (2 semesters, 20 ECTS credits) under my supervision (5 in Canada, 50 in Greece)

### ***Organization of Scientific Conferences***

- ✓ Organizer and Chair of the International Conference: ‘Instrumental Methods of Analysis-Modern Trends and Applications—IMA07’, 2007. Patras, Greece
- ✓ Member of the Scientific Committee of the ‘International Symposium on Luminescence Spectroscopy, Bologna, Italy, 2008.
- ✓ Member of the Advisory Committee ‘34<sup>th</sup> International Conference on Micro and Nanoengineering’, Athens, Greece 2008
- ✓ Member of the Scientific Committee, 8<sup>th</sup> Conference of the Hellenic Association of Clinical Chemistry-Clinical Biochemistry, Patras, Greece 2009
- ✓ Organizer and Chairman of the ‘XVI International Symposium on Luminescence Spectrometry (ISLS 2014)’, Rhodes, Greece 2014.

### ***Organization of Workshops***

- ‘Molecular Biology Techniques’, University of Toronto, Canada 1992, 1993, 1994 and 1995.
- ‘Molecular Biology Techniques’ Canadian Society of Clinical Chemists, Whistler, BC, Canada 1995.
- Symposium on ‘Advances in Analytical Methods for Biomolecules’, Canadian Chemical Society, Windsor, Canada, 1997.

### ***Referee for 17 International Scientific Journals***

#### ***Editorial Board Member***

Analytical & Bioanalytical Chemistry (2017-2019)  
Clinica Chimica Acta (1999-present)  
Clinical Biochemistry (1999)

#### ***Administrative work***

- |                   |  |
|-------------------|--|
| 1992-98           | Member of the Graduate Studies Committee, Dept. of Chem. and Biochem., Univ. of Windsor, Ontario, Canada.          |
| 1995-98           | Scholarships Officer, Dept. of Chem. and Biochem., U of Windsor  |
| 1995-96           | Awards Committee, U. of Windsor.   |
| 1995-96           | Member of the Graduate Council of the U. of Windsor.   |
| 1999              | Member of the Executive Committee, School of Physical Sciences, U. of Windsor.                                     |
| 2000-05           | Member of the Student Transfer Committee, Dept. of Chemistry, University of Patras, Greece                         |
| 2001-05           | Member of the Committee for the Centre of Instrumental Analysis, University of Patras.                             |
| 2002-03 & 2011-13 | Member of the Senate, University of Patras, Greece   |
| 2006              | Member of the ‘Health and Safety Committee’, Department of Chemistry, University of Patras                         |
| 2005-present      | Member of the Coordinating Committee for the Program of Graduate Studies, Dept of Chemistry, University of Patras. |

2007-10	Member of the Committee for Recycling at the University of Patras.
2007-10	Coordinator of the Committee for the Undergraduate Laboratory Training in the Chemistry Dept., University of Patras.
2007-20	Member of the Undergraduate Curriculum Committee, Dept. of Chemistry, University of Patras.
2009-20	Member of the Internal Evaluation Committee for the Department of Chemistry, University of Patras.
2010-present	Coordinator of the MSc program in ' <i>Analytical Chemistry &amp; Nanotechnology</i> ' offered by the Chemistry Dept., University of Patras.
2011-13	Chairman, Department of Chemistry, University of Patras, Greece
2011-16	Coordinator of the Internal Evaluation Committee of the Dept. of Chemistry, University of Patras
2011-16	Coordinator of the Committee for 'Promotion, Development and Transparency' of the Chemistry Dept., University of Patras
2011-13	Member of the Committee for Connecting the Chemistry Department with the Economy of Greece.
2011-13	Member of the Erasmus Committee (European Student Mobility Program), Dept of Chemistry, Univ. of Patras
2011-16	Member of the Committee for the 'Practical Exercise' (Industrial placements), Dept. of Chemistry, University of Patras, Greece
2013-17	Member of the 'University Council', University of Patras, Greece

#### **CUMULATIVE DATA ON PUBLISHED WORK (CAREER TOTALS)**

<b>Original research publications (ISI):</b>	<b>119</b>
<b>Review articles (Invited):</b>	<b>8</b>
<b>Books (in English):</b>	<b>2</b>
<b>Chapters in international books:</b>	<b>14</b>
<b>Communications to international scientific conferences:</b>	<b>&gt; 90</b>
<b>Communications to national scientific meetings:</b>	<b>&gt; 21</b>
<b>Patents (Greek):</b>	<b>6</b>

*Scientific Journals & number of papers*

<b>Journal</b>	<b>Papers</b>	<b>Impact Factor (IF 2023)</b>
Journal of the American Chemical Society (JACS)	1	15.0
Nucleic Acids Research	4	14.9
Biosensors & Bioelectronics	5	12.6
Critical Reviews in Clinical Laboratory Science	1	10.0
Clinical Chemistry	11	9.3
Food Chemistry	1	8.8
Analytical Chemistry	27	8.0
Clinical Chemistry and Laboratory Medicine	1	6.8
Analytica Chimica Acta	9	6.2
Talanta	2	6.1
Journal of Agricultural and Food Chemistry	3	6.1
Microchimica Acta	1	5.7
European Journal of Human Genetics	1	5.2
Clinica Chimica Acta	3	5.0
Microchemical Journal	2	4.8
Methods	1	4.8
Bioconjugate Chemistry	1	4.7
Analytical & Bioanalytical Chemistry	15	4.3
Analyst	7	4.2
Human Mutation	2	3.9
Nanotechnology	1	3.5
Journal of Pharmaceutical Sciences	1	3.8
Journal of Chromatography B	1	3.0
Journal of Chemical Education	1	3.0
Electrophoresis	1	2.9
Analytical Biochemistry	6	2.9
Clinical Biochemistry	4	2.8
Chemical Physics Letters	1	2.8
Biotechniques	1	2.7
Journal of Immunological Methods	1	2.2
Pharmacogenomics	1	2.1
Protein Expression and Purification	1	1.6
Genetic Testing	1	1.4



## LIST OF PUBLICATIONS

### (A) ORIGINAL PUBLICATIONS

- A119. Gkini, I.P., Christopoulos, P., Conides, A., Kalogianni, D.P., Christopoulos, T.K. Molecular rapid test for identification of tuna species. *Biosensors*, **2024**; 14: 82  
[<https://doi.org/10.3390/bios14020082>]
- A118. Kakarelidou M, Christopoulos, P., Conides, A., Kalogianni, D.P., Christopoulos, T.K. Fish DNA sensors for authenticity assessment—Application to Sardine species identification. *Molecules*, **2024**; 29: 677.  
<https://doi.org/10.3390/molecules29030677>
- A117. Christopoulou N-M, Mamoulaki V, Mitsiakou A, Samolada E, Kalogianni DP, Christopoulos TK. Screening method for the visual discrimination of olive oil from other vegetable oils by a multispecies DNA sensor. *Analytical Chemistry*, **2024**; 96: 1803–1811  
[<https://doi.org/10.1021/acs.analchem.3c05507>]
- A116. Christopoulou N-M, Figgou E, Kalaitzis P, Kalogianni DP, Christopoulos TK. Multiallelic DNA sensors for molecular traceability of olive oil varietal origin. *Sensors & Actuators: B. Chemical*, **2024**; 406: 135423  
[<https://doi.org/10.1016/j.snb.2024.135423>]
- A115. Kalligosfyri PM, Tragoulias SS, Tsikas P, Lamprou E, Christopoulos TK, Kalogianni DP. Design and validation of a three-dimensional printer-based system enabling rapid, low-cost construction of the biosensing areas of lateral flow devices for immunoassays and nucleic acid assays. *Analytical Chemistry*, **2024**; 96(1): 572–580  
[<https://doi.org/10.1021/acs.analchem.3c04915>]
- A114. Christopoulou N-M, Kalogianni DP, Christopoulos TK. Multifold improvement in detection capability of lateral flow immunosensors for allergens via macromolecular crowding. *Talanta* **2023**; 265: 124899 [ <https://doi.org/10.1016/j.talanta.2023.124899> ]
- A113. Lamprou E, Sotiriou M, Kalligosfyri PM, Kalogianni DP, Christopoulos TK. A universal lateral flow assay for microRNA visual detection in urine samples. *Talanta* **2023**; 262: 124682 [ <https://doi.org/10.1016/j.talanta.2023.124682> ]
- A112. Christopoulou N-M, Kalogianni DP, Christopoulos TK. Macromolecular crowding agents enhance the sensitivity of lateral flow immunoassays. *Biosensors & Bioelectronics* **2022**; 218: 114737  
[<https://doi.org/10.1016/j.bios.2022.114737>]
- A111. Christopoulou N-M, Kalogianni DP, Christopoulos TK. Posidonia oceanica (Mediterranean tapeweed) leaf litter as a source of fluorescent carbon dot preparations. *Microchemical Journal*, **2021**; 161: 105787.  
[<https://doi.org/10.1016/j.microc.2020.105787>]

- A110. Sevastou A, Tragoulias SS, Kalogianni DP, Christopoulos TK. Mix-and-read method for assessment of milk pasteurization using a smartphone or a common digital camera.  
*Analytical & Bioanalytical Chemistry*, **2020**; 412: 5663–5669  
[<https://doi.org/10.1007/s00216-020-02786-3>]
- A109. Kalligosfyri PM, Sevastou A, Kyriakou IK, Tragoulias SS, Kalogianni DP, Christopoulos TK. Smartphone-based chemiluminometric hybridization assays and quantitative competitive polymerase chain reaction.  
*Analytica Chimica Acta*, **2019**; 1088: 123-130  
[<https://doi.org/10.1016/j.aca.2019.08.051>]
- A108. Galaziou A, Christopoulos TK, Ioannou PC. Paper-based device providing visual genetic signatures for precision medicine. Application to breast cancer.  
*Analytical & Bioanalytical Chemistry*, **2019**; 411: 3769-3776  
[<https://doi.org/10.1007/s00216-019-01838-7>]
- **PAPER IN FOREFRONT** (“Guided by the peer reviews, the Editors select a number of exceptional papers for rapid publication as ‘*Papers in Forefront*’. These articles are given priority treatment, and they are printed prominently in a journal issue”)
- A107. Magiati M, Myridaki VM, Christopoulos TK, Kalogianni DP. Lateral flow test for meat authentication with visual detection.  
*Food Chemistry*, **2019**; 274: 803-807.
- A106. Kyriakou IK, Mavridis K, Kalogianni DP, Christopoulos TK, Ioannou PC, Skorilas A. Multianalyte quantitative competitive PCR on optically encoded microspheres for an eight-gene panel related to prostate cancer.  
*Analytical & Bioanalytical Chemistry*, **2018**; 410: 971-980  
[<https://doi.org/10.1007/s00216-017-0595-0>]
- A105. Kouloulia S, Lazaridou M, Christopoulos TK, Ioannou PC. Multi-allele dipstick assay for visual genotyping of four novel SIRT1 gene variant alleles as candidate biomarkers for sporadic Parkinson disease.  
*Microchimica Acta*, **2017**; 184: 2845-2853.
- A104. Spyrou EM, Kalogianni DP, Tragoulias SS, Ioannou PC, Christopoulos TK. Digital camera and smartphone as detectors in paper-based chemiluminometric genotyping of single-nucleotide polymorphisms.  
*Analytical & Bioanalytical Chemistry*, **2016**; 408: 7393-7402  
[doi:10.1007/s00216-016-9819-y]
- A103. Fountoglou N, Petropoulou M, Iliadi A, Christopoulos TK, Ioannou PC. Two-panel molecular testing for genetic predisposition for thrombosis using multi-allele visual biosensors.  
*Analytical & Bioanalytical Chemistry*, **2016**; 408: 1943-1952.
- A102. Amvrosiadiou M, Petropoulou M, Poulou M, Tzetis M, Kanavakis E, Christopoulos TK, Ioannou PC. Multi-allele genotyping platform for the simultaneous detection of mutations in the Wilson disease related ATP7B gene.  
*Journal of Chromatography B*, **2015**; 1006: 201-208.
- A101. Petropoulou M, Poula A, Kanavakis E, Traeger-Synodinos J, Christopoulos TK, Ioannou PC. Screening nondeletion alpha-thalassemia mutations in the HBA1 and HBA2 genes by high-resolution melting analysis.

- Clinical Chemistry & Laboratory Medicine*; **2015**; 53: 1951-1959.
- A100. Petropoulou M, Poula A, Traeger-Synodinos J, Kanavakis E, Christopoulos TK, Ioannou PC. Multi-allele DNA biosensor for the rapid genotyping of 'nondeletion' alpha thalassaemia mutations in HBA1 and HBA2 genes by means of multiplex primer extension reaction.  
*Clinica Chimica Acta*, **2015**; 446: 241-247
- A99. Kalogianni DP, Bazakos C, Boutsika L, Targem M, Christopoulos TK, Kalaitzis P, Ioannou PC. Olive oil DNA fingerprinting by multiplex SNP-genotyping on fluorescent microspheres.  
*Journal of Agricultural and Food Chemistry*, **2015**; 63: 3121-3128  
[<https://doi.org/10.1021/jf5054657>]
- A98. Sapountzi EA, Tragoulias SS, Kalogianni DP, Ioannou PC, Christopoulos TK. Lateral flow devices for nucleic acid analysis exploiting quantum dots as reporters.  
*Analytica Chimica Acta*, **2015**; 864: 48-54  
[<http://dx.doi.org/10.1016/j.aca.2015.01.020>]
- A97. Papanikos F, Skoulatou C, Sakellariou P, Kekou K, Christopoulos TK, Kanavakis E, Traeger-Synodinos J, Ioannou PC. A simplified approach for FSHD molecular testing.  
*Clinica Chimica Acta*, **2014**; 429: 96-103
- A96. Papanikos F, Iliadi A, Petropoulou M, Penelope C. Ioannou PC, Christopoulos TK, Kanavakis E, Traeger-Synodinos J. Lateral flow dipstick test for genotyping of 15 beta-globin gene (*HBB*) mutations with naked-eye detection.  
*Analytica Chimica Acta*, **2012**; 727: 61-66.
- A95. Trantakis IA, Christopoulos TK, Spaniolas S, Kalaitzis P, Ioannou PC, Tucker GA. Quantitative bioluminometric method for DNA-based species/variety identification in food authenticity assessment.  
*Journal of Agricultural & Food Chemistry*, **2012**; 60: 912-916.
- A94. Trantakis IA, Spaniolas S, Kalaitzis P, Ioannou PC, Tucker GA, Christopoulos TK. Dipstick test for DNA-based food authentication. Application to coffee authenticity assessment.  
*Journal of Agricultural & Food Chemistry*, **2012**; 60: 713-717.
- A93. Iliadi A, Petropoulou M, Ioannou PC, Christopoulos TK, Anagnostopoulos NI, Kanavakis E, Traeger-Synodinos J. Absolute quantification of the alleles in somatic point mutations by bioluminometric methods based on competitive PCR in the presence of a locked nucleic acid blocker or an allele-specific primer.  
*Analytical Chemistry*, **2011**; 83: 6545-6551.
- A92. Kalogianni DP, Boutsika L, Kouremenou P, Christopoulos TK, Ioannou PC. Carbon nano-strings as reporters in lateral-flow devices for DNA sensing by hybridization.  
*Analytical & Bioanalytical Chemistry*, **2011**; 400: 1145-1152.
- A91. Elenis D, Ioannou PC, Christopoulos TK. A nanoparticle-based sensor for visual detection of multiple mutations.  
*Nanotechnology*, **2011**; 22: 155501
- A90. Litos IK, Ioannou PC, Christopoulos TK, Tzetzis M, Kanavakis E, Traeger-Synodinos J. Quadruple-allele dipstick test for simultaneous visual genotyping of A896G

- (Asp299Gly) and C1196T (Thr399Ile) polymorphisms in the toll-like receptor-4 gene. *Clinica Chimica Acta*, **2011**; 412: 1968-1972.
- A89. Petrakis EC, Trantakis IA, Kalogianni DP, Christopoulos TK. Screening for unknown mutations by a bioluminescent protein truncation test with homogeneous detection. *Journal of the American Chemical Society*, **2010**; 132: 5091-5095.
- A88. Vlachou MA, Glynou KM, Ioannou PC, Christopoulos TK, Vartholomatos G. Development of a three-biosensor panel for visual detection of thrombophilia-associated mutations. *Biosensors & Bioelectronics* **2010**; 26: 228-234
- A87. Konstantou JK, Iliadi AC, Ioannou PC, Christopoulos TK, Anagnostopoulos NI, Kanavakis E, Traeger-Synodinos J. Visual screening for JAK2V617F mutation by a disposable dipstick. *Analytical & Bioanalytical Chemistry*, **2010**; 397: 1911-1916.
- A86. Trantakis IA, Fakis M, Tragoulias SS, Christopoulos TK, Persephonis P, Giannetas V, Ioannou P. Ultrafast fluorescence dynamics of Sybr Green I/DNA complexes. *Chemical Physics Letters*, **2010**; 485: 187-190.
- A85. Tsiakalou V, Petropoulou M, Ioannou PC, Christopoulos TK, Kanavakis E, Anagnostopoulos N, Savvidou I, Traeger-Synodinos J. Bioluminometric assay for relative quantification of mutant allele burden. Application to the oncogenic somatic point mutation JAK2V617F. *Analytical Chemistry*, **2009**; 81: 8596-8602.
- A84. Iliadi A, Makrythanasis P, Tzetis M, Tsipi M, Traeger-Synodinos J, Ioannou PC, Kanavakis E, Christopoulos TK. Association of TLR4 single nucleotide polymorphisms and sarcoidosis in Greek patients. *Genetic Testing & Molecular Biomarkers*, **2009**; 13: 849-853.
- A83. Litos IK, Ioannou PC, Christopoulos TK, Traeger-Synodinos J, Kanavakis E. Multianalyte, dipstick-type, nanoparticle-based DNA biosensor for visual genotyping of single-nucleotide polymorphisms. *Biosensors & Bioelectronics*, **2009**; 24: 3135-3139.
- A82. Elenis DS, Ioannou PC, Christopoulos TK. Quadruple-allele chemiluminometric assay for simultaneous genotyping of two single-nucleotide polymorphisms. *Analyst*, **2009**; 134: 725-730.
- A81. Toubanaki DK, Christopoulos TK, Ioannou PC, Flordellis CS. Identification of single-nucleotide polymorphisms by the oligonucleotide ligation reaction – A DNA biosensor for simultaneous visual detection of both alleles. *Analytical Chemistry*, **2009**; 81: 218-224.
- A80. Toubanaki DK, Christopoulos TK, Ioannou PC, Flordellis CS. High-throughput chemiluminometric genotyping of single nucleotide polymorphisms of histamine, serotonin and adrenergic receptor genes. *Analytical Biochemistry* **2009**; 385: 34-41.
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