

Publication list

Name: Maria Vamvakaki

Publications in refereed journals and proceedings of International Conferences:

A. *Until 2004*

- *Papers*

1. **M. Vamvakaki**, N.A. Chaniotakis*
“Solid-contact ion-selective electrode with stable internal electrode”

Analytica Chimica Acta **1996**, 320(1), 53.
2. V. Butun, C.E. Bennett, **M. Vamvakaki**, A.B. Lowe, N.C. Billingham, S.P. Armes*
“Selective Betainisation of Tertiary Amine Methacrylate Block Copolymers”

J. Mater. Chem. **1997**, 7(9), 1693.
3. **M. Vamvakaki**, N.C. Billingham, S.P. Armes*
“Synthesis of Novel Block and Statistical Methacrylate-based Ionomers Containing Acidic, Basic or Betaine Residues”

Polymer **1998**, 39, 2331.
4. **M. Vamvakaki**, N.C. Billingham, S.P. Armes*
“Synthesis of water-soluble statistical copolymers and terpolymers containing pendent oligo(ethylene glycol derivatives)”

Polymer **1999**, 40, 5161.
5. **M. Vamvakaki**, N.C. Billingham, S.P. Armes*
“Synthesis of Controlled Structure Water-Soluble Diblock Copolymers via Oxyanionic Polymerization”

Macromolecules **1999**, 32, 2088.

6. V. Bütün, **M. Vamvakaki**, N.C. Billingham, S.P. Armes*
"Synthesis and aqueous solution properties of novel neutral/acidic block copolymers"
Polymer **2000**, *41*, 3173.
7. A.B. Lowe, **M. Vamvakaki**, M.A. Wassall, L. Wong, N.C. Billingham, S.P. Armes, A.W. Lloyd*
"Well-defined Sulfobetaine-based Statistical Copolymers as Potential Anti-bioadherent Coatings"
J. Biomed. Mater. Res. **2000**, *52*, 88.
8. M.V. de Paz Banez, K.L. Robinson, **M. Vamvakaki**, S.F. Lascelles, S.P. Armes*
"Synthesis of Novel Cationic Polymeric Surfactants"
Polymer **2000**, *41*, 8501.
9. M.J. Percy, C. Barthet, J.C. Lobb, M.A. Khan, S.F. Lascelles, **M. Vamvakaki**, S.P. Armes*
"Synthesis and Characterization of Vinyl Polymer-Silica Colloidal Nanocomposites"
Langmuir **2000**, *16*, 6913.
10. **M. Vamvakaki**, C.S. Patrickios*
"Polyelectrolytic Amphiphilic Model Networks in Water: A Molecular Thermodynamic Theory for Their Microphase Separation"
J. Phys. Chem. B **2001**, *105*, 4979.
11. U. Rungsardthong, M. Deshpande, L. Bailey, **M. Vamvakaki**, S.P. Armes, M.C. Garnett, S. Stolnik*
"Copolymers of Amine Methacrylate with Poly(ethylene glycol) as Vectors for Gene Therapy"
J. Controlled Release **2001**, *73*(2-3), 359.
12. **M. Vamvakaki**, E.N. Yamasaki, S.C. Hadjiyannakou, C.S. Patrickios*
"Characterization of Hydrophilic Networks Synthesized by Group Transfer Polymerization"
Macromol. Symp. **2001**, *171*, 209.

13. **M. Vamvakaki**, N.C. Billingham, * S.P. Armes, J.F. Watts, S.J. Greaves
“Controlled structure copolymers for the dispersion of high-performance ceramics in aqueous media”
J. Mater. Chem. **2001**, *11*(10), 2437-2444.
14. **M. Vamvakaki**, G.-F. Unali, V. Bütün, S. Boucher, K.L. Robinson, N.C. Billingham, S.P. Armes *
“Effect of Partial Quaternization on the Solution Properties of Tertiary Amine-based Polymeric Surfactants: Unexpected Separation of Surface Activity and Cloud Point Behavior”
Macromolecules **2001**, *34*, 6839.
15. **M. Vamvakaki**, S.C. Hadjiyannakou, E. Loizidou, C.S. Patrickios, * S.P. Armes, and N.C. Billingham
“Synthesis and Characterization of Novel Networks with Nano-Engineered Structures: Cross-Linked Star Homopolymers”
Chem. Mater. **2001**, *13*, 4738-4744.
16. E. Demosthenous, S.C. Hadjiyannakou, **M. Vamvakaki**, C.S. Patrickios *
“Synthesis and characterization of polyampholytic model networks: Effects of polymer composition and architecture”
Macromolecules **2002**, *35*, 2252-2260.
17. A.I. Triftaridou, **M. Vamvakaki**, C.S. Patrickios *
“Amphiphilic Diblock and ABC Triblock Methacrylate Copolymers: Synthesis and Aqueous Solution Characterization”
Polymer **2002**, *43*, 2921-2926.
18. A.I. Triftaridou, S.C. Hadjiyannakou, **M. Vamvakaki**, C.S. Patrickios *
“Synthesis, Characterization and Modeling of Cationic Amphiphilic Model Networks: Effects of Polymer Composition and Architecture”
Macromolecules **2002**, *35*, 2506-2513.
19. **M. Vamvakaki**, C.S. Patrickios *

“Synthesis and Characterization of Electrolytic Amphiphilic Model Networks Based on Cross-linked Stars: Effects of Star Architecture”

Chem. Mater. **2002**, *14*, 1630-1638.

20. M.C. Deshpande, M.C. Garnett, **M. Vamvakaki**, L. Bailey, S.P. Armes, S. Stolnik*
“Influence of polymer architecture on the structure of complexes formed by PEG-tertiary amine methacrylate copolymers and phosphorothioate oligonucleotide”

J. Controlled Release **2002**, *81*(1), 185-199.

21. S. Georgiades, **M. Vamvakaki**, C.S. Patrickios*
“Synthesis and characterization of double-hydrophilic model networks based on cross-linked star polymers of poly(ethylene glycol) methacrylate and methacrylic acid”

Macromolecules **2002**, *35*, 4903-4911.

22. A.I. Triftaridou, **M. Vamvakaki**, C.S. Patrickios, * L. Lue
“Synthesis, Characterization and Modeling of ABC Triblock Terpolymers: The Effect of Block Sequence”

Macromol. Symp. **2002**, *183*, 133-138.

23. A.S. Lee, V. Butun, **M. Vamvakaki**, S.P. Armes, J.A. Pople, * A.P. Gast*
“Structure of pH-Dependent Block Copolymer Micelles: Charge and Ionic Strength Dependence”

Macromolecules **2002**, *35*, 8540-8551.

24. G. Hadjikallis, S.C. Hadjiyannakou, **M. Vamvakaki**, C.S. Patrickios*
“Synthesis and Aqueous Solution Characterization of Novel Diblock Polyampholytes Containing Imidazole”

Polymer **2002**, *43*, 7269-7273.

25. E. Loizou, A.I. Triftaridou, T.K. Georgiou, **M. Vamvakaki**, C.S. Patrickios*
“Cationic Double-Hydrophilic Model Networks: Synthesis, Characterization, Modeling and Protein Adsorption Studies”

Biomacromolecules **2003**, *4*, 1150-1160.

26. M.C. Deshpande, M.C. Davies, M.C. Garnett, P.M. Williams, D. Armitage, L. Bailey, **M. Vamvakaki**, S.P. Armes and S. Stolnik*
“The effect of poly(ethylene glycol) molecular architecture on cellular interaction and uptake of DNA complexes”

J. Controlled Release **2004**, *97*(1), 143-156.

27. S.C. Hadjiyannakou, **M. Vamvakaki**, C.S. Patrickios*
“Synthesis, Characterization and Evaluation of Amphiphilic Diblock Copolymer Emulsifiers Based on Hexa(Ethylene Glycol) Methacrylate and Benzyl Methacrylate”

Polymer **2004**, *45*, 3681-3692.

28. S.Couderc-Azouani, J. Sidhu, T.K. Georgiou, D.C. Charalambous, **M. Vamvakaki**, C.S. Patrickios, D.M. Bloor, J. Penfold, J.F. Holzwarth, * E. Wyn-Jones*
“Binding of Sodium Dodecyl Sulfate to Linear and Star Homopolymers of the Nonionic Poly(methoxyhexa(ethylene glycol) methacrylate) and the Polycation Poly(2-(dimethylamino)ethyl methacrylate): Electromotive Force, Isothermal Titration Calorimetry, Surface Tension, and Small-Angle Neutron Scattering Measurements”

Langmuir **2004**, *20*, 6458-6469.

29. M.S. Kyriakou, S.C. Hadjiyannakou, **M. Vamvakaki**, C.S. Patrickios*
“Synthesis, Characterization and Evaluation as Emulsifiers of Amphiphilic-Ionizable Aromatic Methacrylate ABC Triblock Terpolymers”

Macromolecules **2004**, *37*, 7181-7187.

30. T.K. Georgiou, **M. Vamvakaki**, C.S. Patrickios*
“Microphase Separation Under Constraints: A Molecular Thermodynamic Theory for Polyelectrolytic Amphiphilic Model Networks in Water”

Polymer **2004**, *45*, 7341-7355.

31. T.K. Georgiou, **M. Vamvakaki**, C.S. Patrickios, E.N. Yamasaki and L.A. Phylactou*
“Nanoscopic Cationic Methacrylate Star Homopolymers: Synthesis by Group Transfer Polymerization, Characterization and Evaluation as Transfection Reagents”

Biomacromolecules **2004**, 5, 2221-2229.

- *Proceedings*

1. **M. Vamvakaki**, S.P. Armes, N.C. Billingham
“Synthesis of Methacrylate-Based Copolymers *via* Group-Transfer-Polymerization”
Polym. Prepr., Am. Chem. Soc., Div. Polym. Chem. **1997**, 38(1) 500.
2. L. Bailey, **M. Vamvakaki**, N.C. Billingham, S.P. Armes
“Synthesis and Aqueous Solution Properties of Novel Hydrophilic/Hydrophilic Block Copolymers Based on Tertiary Amine Methacrylates and Poly(ethylene oxide)”
Polym. Prepr., Am. Chem. Soc., Div. Polym. Chem. **1999**, 40(2), 263.
3. C.S. Patrickios, **M. Vamvakaki**
“Polyelectrolytic Amphiphilic Model Networks In Water: Synthesis and Characterization”
Polym. Prepr., Am. Chem. Soc., Div. Polym. Chem. **2001**, 42(1), 657.
4. E. Loizidou, D. Haralambous, **M. Vamvakaki**, C.S. Patrickios, T. Krasia, M. Antonietti
“AB Diblock and ABC Triblock Amphiphilic Copolymers Containing Fluorine: Synthesis by Group Transfer Polymerization (GTP) and Aqueous Solution Characterization”
Abstr. Pap. Am. Chem. Soc. **2001**, 221, COLL-202.
5. S.C. Hadjiyannakou, T. Georgiou, **M. Vamvakaki**, C.S. Patrickios
“Double-Hydrophilic Linear and Star Copolymers Bearing Diol and Tertiary Amine Groups: Synthesis and Aqueous Solution Characterization”
Abstr. Pap. Am. Chem. Soc. **2001**, 221, COLL-204.
6. T. Georgiou, E. Themistou, A. I. Triftaridou, S. C. Hadjiyannakou, **M. Vamvakaki**, C.S. Patrickios
“Nano-engineered model networks: Synthesis, characterization and modelling”
Polym. Prepr., Am. Chem. Soc., Div. Polym. Chem. **2002**, 40(2), 263.
7. A.I. Triftaridou, **M. Vamvakaki**, C.S. Patrickios
“Synthesis and Characterization of Amphiphilic Linear and Star ABC Triblock Copolymers”
Abstr. Pap. Am. Chem. Soc. **2003**, 225, COLL-291.
8. S.C. Hadjiyannakou, **M. Vamvakaki**, C.S. Patrickios
“Synthesis and Characterization of Amphiphilic Diblock Copolymer Emulsifiers”
Abstr. Pap. Am. Chem. Soc. **2003**, 225, COLL-292.

9. **M. Vamvakaki**, L. Papoutsakis, V. Katsamanis, S. H. Anastasiadis, P. Fragouli, H. Iatrou, N. Hadjichristidis, S. P. Armes, S. Sidorov, D. Zhirov, V. Zhirov, M. Kostylev and L. Bronstein **(invited)**
“Micellar Behavior and Metal Nanoparticle Formation in pH-sensitive Amphiphilic Block Copolymers in Aqueous Media”
Polym. Mater. Sci. Eng., Amer. Chem. Soc. **2003**, *89*, 190.

B. 2005-2012

- Papers

1. **M. Vamvakaki**, L. Papoutsakis, V. Katsamanis, T. Afchoudia, P. Fragouli, H. Iatrou, N. Hadjichristidis, S. P. Armes, S. Sidorov, D. Zhirov, V. Zhirov, M. Kostylev, L. M. Bronstein, and S. H. Anastasiadis*
"Micellization in pH-sensitive amphiphilic block copolymers in aqueous media and the formation of metal nanoparticles"
Faraday Discuss. **2005**, *128*, 129-147.
2. A.I. Triftaridou, **M. Vamvakaki**, C.S. Patrickios, * N. Stavrouli, C. Tsitsilianis*
“Synthesis of Amphiphilic (ABC)_n Multiarm Star Triblock Terpolymers”
Macromolecules **2005**, *38*, 1021-1024.
3. L. M. Bronstein, * **M. Vamvakaki**, * M. Kostylev, V. Katsamanis, B. Stein, and S. H. Anastasiadis
"Transformations of Poly(Methoxy hexa(ethylene glycol) methacrylate)-*b*-(2-(Diethylamino)ethyl methacrylate) Block Copolymer Micelles upon Metallation"
Langmuir **2005**, *21*, 9747-9755.
4. T. K. Georgiou, **M. Vamvakaki**, L. A. Phylactou, C. S. Patrickios*
“Synthesis, Characterization, and Evaluation as Transfection Reagents of Double-Hydrophilic Star Copolymers: Effect of Star Architecture”
Biomacromolecules **2005**, *6*, 2990 -2997.
5. **M. Vamvakaki**,* D. Palioura, A. Spyros, S. P. Armes, and S. H. Anastasiadis*
“Dynamic Light Scattering vs. ¹H NMR Investigation of pH-Responsive Diblock Copolymers in Water”
Macromolecules **2006**, *39*, 5106-5112.

6. A.I. Triftaridou, D. Kafouris, M. **Vamvakaki**, T. K. Georgiou, T. C. Krasia, E. Themistou, N. Hadjiantoniou, C. S. Patrickios*
“Three different types of quasi-model networks: synthesis by group transfer polymerization and characterization”
Polym. Bull. **2007**, *58*, 185-190.

7. S. Biggs,* K. Sakai, T. Addison, A. Schmid, S. P. Armes, **M. Vamvakaki**, V. Butun, G. Webber
“Layer-by-Layer Formation of Smart Particle Coatings using Oppositely Charged Block Copolymer Micelles”
Adv. Mater. **2007**, *19*, 247-250.

8. D. Palioura, S. P. Armes, S. H. Anastasiadis, **M. Vamvakaki***
“Metal Nanocrystals Incorporated within pH-Responsive Microgel Particles”
Langmuir **2007**, *23*, 5761-5768.

9. A. I. Triftaridou, **M. Vamvakaki**, C. S. Patrickios*
“Cationic Amphiphilic Model Networks Based on Symmetrical ABCBA Pentablock Terpolymers: Synthesis, Characterization and Modeling”
Biomacromolecules **2007**, *8*, 1615-1623.

10. **M. Vamvakaki**, C. S. Patrickios,* Peter Lindner, Michael Gradzielski*
“Amphiphilic Networks Based on Cross-Linked Star Polymers: A Small-Angle Neutron Scattering Study”
Langmuir **2007**, *23*, 10433-10437.

11. K. Sakai, **M. Vamvakaki**, E.G. Smith, E.J. Wanless, S.P. Armes, S. Biggs*
“Adsorption Characteristics of Zwitterionic Diblock Copolymers at the Silica/Aqueous Solution Interface”
J. Colloid Interface Sci. **2008**, *317*, 383–394.

12. K. Sakai, G. B. Webber, C. –D. Vo, E. J. Wanless, **M. Vamvakaki**, V. Bütün, S. P. Armes, S. Biggs*

“Characterization of Layer-by-Layer Self-Assembled Multilayer Films of Diblock Copolymer Micelles”

Langmuir **2008**, *24*, 116-123.

13. M. Vamvakaki,* C.S. Patrickios

“Synthesis and Characterization of the Swelling and Mechanical Properties of Amphiphilic Ionizable Model Conetworks Containing *n*-Butyl Methacrylate Hydrophobic Blocks”

Soft Matter **2008**, *4*, 268-276.

14. M. Farsari,* A. Ovsianikov, **M. Vamvakaki**, B.N. Chichkov, C. Fotakis

“Fabrication of three-dimensional photonic crystal structures containing an active nonlinear optical chromophore”

Appl. Phys. A **2008**, *93*, 11-15.

15. A. Ovsianikov, J. Viertl, B. N. Chichkov,* M. Oubaha, B. D. MacCraith, I. Sakellari, A. Giakoumaki, D. Gray, **M. Vamvakaki**, M. Farsari, C. Fotakis

“Two-photon polymerization of hybrid sol-gel materials for photonics applications”

Laser Chemistry **2008**, Article ID 493059.

16. A. Ovsianikov, J. Viertl, B. Chichkov,* M. Oubaha, B. MacCraith, I. Sakellari, A. Giakoumaki, D. Gray, **M. Vamvakaki**, M. Farsari and C. Fotakis

“Ultra-low shrinkage hybrid photosensitive material for two-photon polymerization microfabrication”

ACS Nano **2008**, *2*, 2257-2262.

17. S. H. Anastasiadis* and **M. Vamvakaki**

“Synthesis of Metallic Nanoparticles within pH-sensitive Polymeric Matrices”

Int. J. Nanotechnol. **2009**, *6*, 46-70.

18. A. Ovsianikov,* X. Shizhou, B. N. Chichkov, M. Farsari, **M. Vamvakaki** and C. Fotakis

“Shrinkage of microstructures produced by two-photon polymerization of Zr-based hybrid photosensitive materials”

Optics Express **2009**, *17*, 2143-2148.

19. F. Claeysens,^{*} E. A. Hasan, A. Gaidukeviciute, D. S. Achilleos, A. Ranella, C. Reinhardt, A. Ovsianikov, X. Shizhou, C. Fotakis, **M. Vamvakaki**, B. N. Chichkov and M. Farsari^{*}
“Three-dimensional Biodegradable Structures Fabricated by Two-Photon Polymerization”

Langmuir **2009**, *25*, 3219-3223.

20. K. E. Christodoulakis, D. Palioura, S. H. Anastasiadis and **M. Vamvakaki**^{*}
“Metal nanocrystals embedded within polymeric nanostructures: Effect of polymer-metal compound interactions”

Topics in Catalysis: Special Issue **2009**, *52*, 394-411.

21. A. Mateescu, J. Ye, R. Narain and **M. Vamvakaki**^{*}
“Synthesis and Characterization of Novel Glycosurfaces by ATRP”

Soft Matter **2009**, *5*, 1621-1629.

22. G. Pasparakis,^{*} **M. Vamvakaki**, N. Krasnogor and C. Alexander^{*}
“Diol-boronic acid complexes integrated by responsive polymers-a route to chemical sensing and logic operations”

Soft Matter **2009**, *5*, 3839-3841.

23. K. E. Christodoulakis, **M. Vamvakaki**^{*}
“Amphoteric Core-Shell Microgels: Contraphilic Two Compartment Colloidal Particles”

Langmuir **2010**, *26*, 639-647.

24. X.Z. Jiang, **M. Vamvakaki**, R. Narain^{*}
“Copper-Catalyzed Bimolecular Coupling of α,ω -dibromide Functionalized Poly(γ -caprolactone)”

Macromolecules **2010**, *43*, 3228-3232.

- 25. D. S. Achilleos, M. Vamvakaki* (invited review)**
“End-Grafted Polymer Chains onto Inorganic Nano-Objects”
Materials **2010**, *3*, 1981-2026.
- 26. E. Stratakis, A. Mateescu, M. Barberoglou, M. Vamvakaki, C. Fotakis and S. H. Anastasiadis***
“From Superhydrophobicity and Water Repellency to Superhydrophilicity: Smart Polymer-Functionalized Surfaces”
Chem. Comm. **2010**, *46*, 4136 - 4138.
- 27. K. E. Christodoulakis, M. Vamvakaki***
“pH-responsive microgel particles comprising solely basic or acidic residues”
Macromolecular symposia **2010**, *291/292*, 106-114.
- 28. U. Jonas* and M. Vamvakaki (invited Highlight)**
“From Fluidic Self-Assembly to Hierarchical Structures - Superhydrophobic Flexible Interfaces”
Angewandte Chemie-International Edition in English **2010**, *49*, 4542-4543.
- 29. I. Sakellari, A. Gaidukeviciute, A. Giakoumaki, D. Gray, C. Fotakis, M. Farsari,* M. Vamvakaki,* C. Reinhardt, A. Ovsianikov, and B. N. Chichkov**
“Two-photon polymerization of titanium containing sol-gel composites for three-dimensional structure fabrication”
Appl. Phys. A **2010**, [100](#), 359-364.
- 30. M. Farsari,* I. Sakellari, D. Gray, M. Vamvakaki, C. Fotakis, A. Ovsianikov and B. N. Chichkov**
“Three-dimensional direct writing of novel sol-gel composites for photonics applications”
Int. J. Nanomanufacturing, **2010**, *100*, 164-175.
- 31. D. S. Achilleos and M. Vamvakaki***
“Multi-responsive Spiropyran-based Copolymers Synthesized by Atom Transfer Radical Polymerization”

Macromolecules **2010**, *43*, 7073–7081.

- 32.** E. Pavlopoulou, G. Portale, K. E. Christodoulakis, **M. Vamvakaki**, W. Bras and S. H. Anastasiadis*
“Following the Synthesis of Metal Nanoparticles within pH-responsive Microgel Particles by SAXS”
Macromolecules **2010**, *43*, 9828–9836.

- 33.** M. Farsari,* **M. Vamvakaki** and B. N. Chichkov (**invited review**)
“Multiphoton Polymerization of Hybrid Materials”
J. Opt. **2010**, *12*, 124001.

- 34.** G. Pasparakis,* Th. Manouras, A. Selimis, **M. Vamvakaki**, and P. Argitis
“Laser induced cell detachment and patterning using photodegradable polymer substrates”
Angew. Chem. Int. Ed. **2011**, *50*, 4142-4145.

- 35.** G. Pasparakis and **M. Vamvakaki*** (**invited review**)
“Multiresponsive polymers: nano-sized assemblies, stimuli-sensitive gels and smart surfaces”
Polym. Chem. **2011**, *2*, 1234-1248.

Top Ten most-read “Polymer Chemistry” articles in March, May, June, July and August 2011.
Top accessed *Polymer Chemistry Reviews* of 2011.

- 36.** V. G. Matveeva, E. M. Sulman,* S. H. Anastasiadis, **M. Vamvakaki**, G. N. Demidenko, L. Zh. Nikoshvili,* P. M. Valetsky and L. M. Bronstein
“Surface characteristics of block copolymer solutions as a key element to understanding of the block copolymer based catalyst formation and behaviour”
Colloids and Surfaces A **2011**, *383*, 102-108.

- 37.** V. Melissinaki, A.A. Gill, I. Ortega, **M. Vamvakaki**, A. Ranella, J.W. Haycock, C. Fotakis, M. Farsari and F. Claeysens*
“Direct Laser Writing of 3D scaffolds for neural tissue engineering applications”
Biofabrication **2011**, *3*, 045005.

38. M. Malinauskas, A. Gaidukeviciute, V. Purlys, A. Zukauskas, I. Sakellari, E. Kabouraki, A. Candianni, D. Gray, S. Pissadakis, R. Gadonas, A. Piskarskas, C. Fotakis, **M. Vamvakaki** and M. Farsari*

“Direct laser writing of microoptical structures using a Ge-containing hybrid material”

Metamaterials **2011**, *5*, 135-140.

39. K. Terzaki,* N. Vasilantonakis, A. Gaidukeviciute, C. Reinhardt, C. Fotakis, **M. Vamvakaki**, and M. Farsari

“3D conducting nanostructures fabricated using direct laser writing”

Opt. Mater. Expr. **2011**, *1*, 586-597.

Top Downloads in Matematerials – October 2012

40. G. Pasparakis,* Th. Manouras, P. Argitis and **M. Vamvakaki (invited Feature Article)**

“Photodegradable polymers for biotechnological applications”

Macromol. Rapid. Commun. **2012**, *33*, 183-198.

41. N. [Vasilantonakis](#), K. Terzaki, I. Sakellari, V. Purlys, D. Gray, C.M. Soukoulis, **M. Vamvakaki**, M. Kafesaki, M. Farsari*

“Three-Dimensional Metallic Photonic Crystals with Optical Bandgaps”

Adv. Mater. **2012**, *24*, 1101-1105.

42. M. Kaliva, G. Armatas and **M. Vamvakaki***

“Microporous Polystyrene Particles for Selective Carbon Dioxide Capture”

Langmuir **2012**, *28*, 2690-2695.

43. I. Sakellari, E. Kabouraki, D. Gray, V. Purlys, C. Fotakis, A. Pikulin, N. Bituryn, **M. Vamvakaki** and M. Farsari

“Diffusion-Assisted High-Resolution Direct Femtosecond Laser Writing”

ACS Nano **2012**, *6*, 2302–2311.

44. D. S. Achilleos, T. A. Hatton and **M. Vamvakaki***
“Light-regulated supramolecular engineering of polymeric nanocapsules”
J. Am. Chem. Soc. **2012**, *134*, 5726–5729.
45. M. Malinauskas, A. Zukauskas, V. Purlys, A. Gaidukevičiūtė, Z. Balevičius, A. Piskarskas, C. Fotakis, S. Pissadakis, D. Gray, R. Gadonas, **M. Vamvakaki**, M. Farsari
“3D micro-optical elements made using a photostructurable germanium silicate”
Optics and Lasers in Engineering **2012**, *50*, 1785–1788.
46. G. Bickauskaite, M. Manousidaki, K. Terzaki, E. Kambouraki, I. Sakellari, N. Vasilantonakis, D. Gray, C. M. Soukoulis, C. Fotakis, **M. Vamvakaki**, M. Kafesaki, M. Farsari, A. Pikulin, N. Bityurin
“3D Photonic Nanostructures via Diffusion-Assisted Direct fs Laser Writing”
Advances in OptoElectronics **2012**, *2012*, Article ID 927931.
- *Proceedings*
1. T. K. Georgiou, E. N. Yamasaki, **M. Vamvakaki**, L. A. Phylactou, C. S. Patrickios
“Cationic Hydrophilic Homo and Co-Polymer Stars: Synthesis, Characterization and Evaluation as Transfection Reagents”
Polym. Mater. Sci. Eng., Amer. Chem. Soc. **2006**, *231*, 26-PMSE.
 2. **M. Vamvakaki**, D. Palioura, S. P. Armes, and S. H. Anastasiadis
“pH-responsive Polymer Microgel Particles: Matrices for Metal Nanocrystals”
Polym. Mater. Sci. Eng., Amer. Chem. Soc. **2007**, *96*, 921.
 3. Mateescu, J. Ye, R. Narain, **M. Vamvakaki**
“Novel Glycosurfaces by Surface-Initiated ATRP”
Polym. Prepr., Am. Chem. Soc., Div. Polym. Chem. **2010**, *240*, 451-POLY.
 4. S. H. Anastasiadis, E. Stratakis, M. Barberoglou, V. Zorba, A. Mateescu, D. S. Achilleos, **M. Vamvakaki**, C. Fotakis
“From superhydrophobicity and water repellence to superhydrophilicity: Smart polymer-functionalized surfaces”
Abstr. Pap. Am. Chem. Soc. **2010**, COLL-151.
 5. F. Claeysens, E. A. [Hasan](#), A. [Gaidukeviciute](#), D. S. [Achilleos](#), A. [Ranella](#), C. [Reinhardt](#), A. [Ovsianikov](#), X. [Shizhou](#), C. [Fotakis](#), **M. Vamvakaki**, C. N. [Chichkov](#), M. [Farsari](#)
“Three-dimensional Polycaprolactone Structures Fabricated by Two-Photon Polymerization”

Emerging Trends and Novel Materials in Photonics **2010**, 1288, 154-161.

6. T.K. Georgiou, M.A. Ward, P. Knight, M.D. Rikkou, **M. Vamvakaki**, E.N. Yamasaki, L.A. Phylactou, C.S. Patrickios
“Cationic star homo- and co-polymers for gene delivery”
Drug Discovery Today **2010**, 15, 1104-1104.
7. M. Chatzinikolaidou, K. Terzaki, **M. Vamvakaki**, M. Farsari, M.C. Kastrinaki, C. Pontikoglou, H. Papadaki
“Adhesion and growth of bone marrow mesenchymal stem cells on 3D organic-inorganic composite scaffolds
International Journal of Artificial Organs **2011**, 34, 666-666 (**Special Issue**).

