

## NIKOLAOS M. KAROUSIS

### PUBLICATIONS –MAY 2011

#### A. Ph.D. THESIS

1. “Synthesis and reactivity of 1-aroyl- and 1-aroylmethylenepyrroles”, Chemistry Department, University of Ioannina, Greece (3/2003).

#### B. BOOK CHAPTER

1. “Functions Containing Two Halogens and Two Other Heteroatom Substituents”, G. Varvounis and N. Karousis, In *Comprehensive Organic Functional Group Transformations II* (COFGT-II), A. R. Katritzky, R. J. K. Taylor, E. F. V. Scriven (eds.), Elsevier Oxford. 2005, Chapter 6.08, p. 271-294.

#### C. PAPERS IN REFEREED JOURNALS

1. “Synthesis of (*E*)-3-(1*H*-Pyrrol-3-yl)prop-2-ene Derivatives Using Organophosphorous Reagents”, N. Karousis, J. Liebscher and G. Varvounis, *Synthesis* **9**, 1494 (2006).
2. “Synthesis of 1-aroylmethylpyrroles as useful intermediates for further chemical transformation”, N. Karousis, K. Koriatopoulou and G. Varvounis, *Arkivoc* **2**, 124 (2008).
3. “Aryl diazonium functionalization of carbon nanohorns”, G. Pagona, N. Karousis and N. Tagmatarchis, *Carbon* **46**, 604 (2008).
4. “Alignment of Carbon Nanotubes in Weak Magnetic Fields”, J. Tumpene, N. Karousis, N. Tagmatarchis and B. Nordén, *Angewandte Chemie International Edition* **47**, 5148 (2008).
5. “Catalytic Activity of Surfactant Solubilised Multi-Walled Carbon Nanotubes Decorated with Palladium Nanoparticles”, N. Karousis, G.-E. Tsotsou, N. Ragoussis and N. Tagmatarchis, *Diamond and Related Materials* **17**, 1582 (2008).
6. “Carbon Nanotubes Decorated with Palladium Nanoparticles: Synthesis, Characterization and Catalytic Activity”, N. Karousis, G.-E. Tsotsou, F. Evangelista, P. Rudolf, N. Ragoussis and N. Tagmatarchis, *The Journal of Physical Chemistry C* **112**, 13463 (2008).

7. "Aryl-Derivatized, Water Soluble Functionalized Carbon Nanotubes for Biomedical Applications", N. Karousis, H. Ali-Boucetta, K. Kostarelos and N. Tagmatarchis, *Materials Science and Engineering B* **152**, 8, (2008)
8. "Novel synthesis of the pyrrolo[2,1-c][1,4]benzodiazocine ring system via a Dieckmann condensation", K. Koriatopoulou, N. Karousis and G. Varvounis, *Tetrahedron* **64**, 10009 (2008)
9. "Methodologies for the Chemical Functionalization of Carbon Nanohorns", G. Mountrichas, G. Pagona, G. Rotas, N. Karousis, S. Pispas and N. Tagmatarchis, *Journal of Nanostructured Polymers and Nanocomposites* **4**, 28 (2008)
10. "Properties, Applications and Functionalization of Carbon Nanohorns", G. Pagona, G. Mountrichas, G. Rotas, N. Karousis, S. Pispas and N. Tagmatarchis, *International Journal of Nanotechnology* **6**, 176 (2009)
11. "Decoration of Carbon Nanohorns with Palladium and Platinum Nanoparticles", N. Karousis, T. Ichihashi, M. Yudasaka, S. Iijima and N. Tagmatarchis, *Journal of Nanoscience and Nanotechnology* **9**, 6047 (2009)
12. "Peptidomimetic-functionalized carbon nanotubes with antitrypsin activity", N. Karousis, R. M. Papi, A. Siskos, P. Vakalopoulou, P. Glezakos, Y. Sarigiannis, G. Stavropoulos, D. A. Kyriakidis, N. Tagmatarchis, *Carbon* **47**, 3550 (2009)
13. "Porphyrin counter anion in imidazolium-modified graphene-oxide", N. Karousis, S. P. Economopoulos, E. Sarantopoulou, N. Tagmatarchis, *Carbon* **48**, 854 (2010)
14. "Imidazolium modified carbon nanohorns: Switchable solubility and stabilization of metal nanoparticles" N. Karousis, T. Ichihashi, S. Chen, H. Shinohara, M. Yudasaka, S. Iijima, N. Tagmatarchis, *Journal of Materials Chemistry* **20**, 2959 (2010).
15. "Current progress on the chemical modification of carbon nanotubes", N. Karousis, N. Tagmatarchis, D. Tasis, *Chemical Reviews* **110**, 5366 (2010)
16. "Chemically-induced thermally-controlled peel-off of the external walls of double-walled carbon nanotubes", N. Karousis, K. Kobayashi, H. Shinohara, N. Tagmatarchis, *Small* **6**, 2826 (2010)
17. "Microwave assisted covalent functionalization of C<sub>60</sub>@SWCNT peapods", N. Karousis, S. P. Economopoulos, Y. Iizumi, T. Okazaki, Z. Liu, K. Suenaga, N. Tagmatarchis, , *Chemical Communications* **46**, 9110 (2010)
18. "Graphene Oxide with Covalently Linked Porphyrin Antennae: Synthesis, Characterization and Photophysical Properties", N. Karousis, A. S. D. Sandanayaka, T. Hasobe, S. P. Economopoulos, E. Sarantopoulou, N. Tagmatarchis, *Journal of Materials*

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19. "Microwave-assisted functionalization of carbon nanohorns via [2+1] nitrenes cycloaddition", N. Karousis, T. Ichihashi, M. Yudasaka, S. Iijima, N. Tagmatarchis, *Chemical Communications*, **47**, 1604 (2011)
20. "Microwave-assisted functionalization of carbon nanostructured materials", S. P. Economopoulos, N. Karousis, G. Rotas, G. Pagona, N. Tagmatarchis, *Current Organic Chemistry* **15**, 1121(2011)