

## **Dr. A. B. Bourlinos**

### **Short CV info**



**Name:** Athanasios (or Thanos) B. Bourlinos

**Title:** Dr. (Chemist)

**Date of birth:** 4/10/1973

**Place of birth:** Athens, Greece

**Citizenship:** Greek

**Education:** BSc (1991-1995), MSc (1997-1999) and PhD (1999-2002) in Chemistry from Athens University (Greece)

**Professional experience:**

- 2002-2004: Post-doctoral fellow at Materials Science and Engineering, Cornell University, Ithaca NY (USA)
- 2004-2011: Research associate at the Institute of Materials Science, NCSR Demokritos, Athens (Greece)
- 2011-2012: Research associate at the Physics Department, University of Ioannina, Ioannina (Greece)

**Research field:** Chemistry of materials with emphasis to carbon nanostructures

**Patents:** 3

**Publications (Peer-reviewed journals):** 71

**Average impact factor (2009):** 3.890

**Citations:** 1424

**h =** 22

*(Author search: bourlinos via Scopus or Web of Science)*

## Publications

1. “Enhanced hydrogen storage by spillover on metal-doped carbon foam: an experimental and computational study”, Psofogiannakis, G. M.; Steriotis, T. A.; **Bourlinos, A. B.**; Kouvelos, E. P.; Charalambopoulou, G. C.; Stubos, A. K.; Froudakis, G. E., *Nanoscale*, 2011, vol. 3, pp. 933-936.
2. “Pyrolytic formation of a carbonaceous solid for heavy metal adsorption”, **Bourlinos, A. B.**; Karakassides, M. A.; Stathi, P.; Deligiannakis, Y.; Zboril, R.; Dallas, P.; Steriotis, T. A.; Stubos, A. K.; Trapalis, C., *Journal of Materials Science*, 2011, vol. 46, pp. 975-982.
3. “Graphene fluoride: a stable stoichiometric graphene derivative and its chemical conversion to graphene”, Zboril, R.; Karlicky, F.; **Bourlinos, A. B.**; Steriotis, T. A.; Stubos, A. K.; Georgakilas, V.; Safarova, K.; Jancik, D.; Trapalis, C.; Otyepka, M., *Small*, 2010, vol. 6, pp. 2885-2891.
4. “Fullerol ionic fluids”, Fernandes, N.; Dallas, P.; Rodriguez, R.; **Bourlinos, A. B.**; Georgakilas, V.; Giannelis, E. P., *Nanoscale*, 2010, vol. 2, pp. 1653-1656.
5. “Organic functionalisation of graphenes”, Georgakilas, V.; **Bourlinos, A. B.**; Zboril, R.; Steriotis, T. A.; Dallas, P.; Stubos, A. K.; Trapalis, C., *Chemical Communications*, 2010, vol. 46, pp. 1766-1768.
6. “Cornet-like phosphotriazine/diamine polymers as reductant and matrix for the synthesis of silver nanocomposites with antimicrobial activity”, Dallas, P.; Zboril, R.; **Bourlinos, A. B.**; Jancik, D.; Niarchos, D.; Panacek, A.; Petridis, D., *Macromolecular Materials and Engineering*, 2010, vol. 295, pp. 108-114.
7. “The synthesis and properties of nanoscale ionic materials”, Rodriguez, R.; Herrera, R.; **Bourlinos, A. B.**; Li, R.; Amassian, A.; Archer, L. A.; Giannelis, E. P., *Applied Organometallic Chemistry*, 2010, vol. 24, pp. 581-589.
8. “Silver nanoparticles and graphitic carbon through thermal decomposition of a silver/acetylenedicarboxylic salt”, Dallas, P.; **Bourlinos, A. B.**; Komninou, P.; Karakassides, M.; Niarchos, D., *Nanoscale Research Letters*, 2009, vol. 4, pp. 1358-1364.
9. “Aqueous-phase exfoliation of graphite in the presence of polyvinylpyrrolidone for the production of water-soluble graphenes”, **Bourlinos, A. B.**; Georgakilas, V.; Zboril, R.; Steriotis, T. A.; Stubos, A. K.; Trapalis, C., *Solid State Communications*, 2009, vol. 149, pp. 2172-2176.

10. "Solvent-mediated pathways to gelation and phase separation in suspensions of grafted nanoparticles", Anyfantakis, M.; **Bourlinos, A. B.**; Vlassopoulos, D.; Fytas, G.; Giannelis, E. P.; Kumar, S. K., *Soft Matter*, 2009, vol. 5, pp. 4256-4265.
11. "Liquid-phase exfoliation of graphite towards solubilized graphenes", **Bourlinos, A. B.**; Georgakilas, V.; Zboril, R.; Steriotis, T. A.; Stubos, A. K., *Small*, 2009, vol. 5, pp. 1841-1845.
12. "Direct synthesis of carbon nanosheets by the solid-state pyrolysis of betaine", **Bourlinos, A. B.**; Steriotis, T. A.; Zboril, R.; Georgakilas, V.; Stubos, A., *Journal of Materials Science*, 2009, vol. 44, pp. 1407-1411.
13. "Pyrolytic formation and photoluminescence properties of a new layered carbonaceous material with graphite oxide-mimicking characteristics", **Bourlinos, A. B.**; Georgakilas, V.; Zboril, R.; Bakandritsos, A.; Stassinopoulos, A.; Anglos, D.; Giannelis, E. P., *Carbon*, 2009, vol. 47, pp. 519-526.
14. "Easy deposition of amorphous carbon films on glass substrates", **Bourlinos, A. B.**; Georgakilas, V.; Zboril, R., *Carbon*, 2008, vol. 46, pp. 1801-1804.
15. "Reaction of graphite fluoride with NaOH-KOH eutectic", **Bourlinos, A. B.**; Georgakilas, V.; Zboril, R.; Jancik, D.; Karakassides, M. A.; Stassinopoulos, A.; Anglos, D.; Giannelis, E. P., *Journal of Fluorine Chemistry*, 2008, vol. 129, pp. 720-724.
16. "Photoluminescent carbogenic dots", **Bourlinos, A. B.**; Stassinopoulos, A.; Anglos, D.; Zboril, R.; Georgakilas, V.; Giannelis, E. P., *Chemistry of Materials*, 2008, vol. 20, pp. 4539-4541.
17. "Multi-purpose organically modified carbon nanotubes: from functionalization to nanotube composites", Georgakilas, V.; **Bourlinos, A. B.**; Gournis, D.; Tsoufis, T.; Trapalis, C.; Mateo-Alonso, A.; Prato, M., *Journal of the American Chemical Society*, 2008, vol. 130, pp. 8733-8740.
18. "Synthesis, characterization and aspects of superhydrophobic functionalized carbon nanotubes", Georgakilas, V.; **Bourlinos, A. B.**; Zboril, R.; Trapalis, C., *Chemistry of Materials*, 2008, vol. 20, pp. 2884-2886.
19. "Surface functionalized carbogenic quantum dots", **Bourlinos, A. B.**; Stassinopoulos, A.; Anglos, D.; Zboril, R.; Karakassides, M.; Giannelis, E. P., *Small*, 2008, vol. 4, pp. 455-458.
20. "Synthesis and characterization of PbI<sub>2</sub> semiconductor quantum wires within layered solids", Koutselas, I.; Dimos, K.; **Bourlinos, A. B.**; Gournis, D.; Avgeropoulos, A.; Agathopoulos, S.; Karakassides, M. A., *Journal of Optoelectronics and Advanced Materials*, 2008, vol. 10, pp. 58-65.

21. "Synthesis and characterization of 2-D and 3-D covalent networks derived from triazine central cores and bridging aromatic diamines", Dallas, P.; **Bourlinos, A. B.**; Petridis, D.; Boukos, N.; Papadokostaki, K.; Niarchos, D.; Guskos, N., *Polymer*, 2008, vol. 49, pp. 1137-1144.
22. "Observation of multiple quantum transitions in magnetic nanoparticles", Noginova, N.; Weaver, T.; Giannelis, E. P.; **Bourlinos, A. B.**; Atsarkin, V. A.; Demidov, V. V., *Physical Review B*, 2008, vol. 77, 014403 (5 pp).
23. "Large-scale synthesis, size control, and anisotropic growth of  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles: organosols and hydrosols", Tzitzios, V. K.; Bakandritsos, A.; Georgakilas, V.; Basina, G.; Boukos, N.; **Bourlinos, A. B.**; Niarchos, D.; Petridis, D., *Journal of Nanoscience & Nanotechnology*, 2007, vol. 7, pp. 2753-2757.
24. "Preparation of a water-dispersible carbon nanotube-silica hybrid", **Bourlinos, A. B.**; Georgakilas, V.; Zboril, R.; Dallas, P., *Carbon*, 2007, vol. 45, pp. 2136-2139.
25. "Magnetic resonance in nanoparticles: between ferro- and paramagnetism", Noginova, N.; Chen, F.; Weaver, T.; Giannelis, E. P.; **Bourlinos, A. B.**; Atsarkin, V. A., *Journal of Physics: Condensed Matter*, 2007, vol. 19, 246208 (15 pp).
26. "Biopolymer networks for the solid-state production of porous magnetic beads and wires", Bakandritsos, A.; **Bourlinos, A. B.**; Tzitzios, V.; Boukos, N.; Devlin, E.; Steriotis, T.; Kouvelos, V.; Petridis, D., *Advanced Functional Materials*, 2007, vol. 17, pp. 1409-1416.
27. "Silicone-functionalized carbon nanotubes for the production of new carbon-based fluids", **Bourlinos, A. B.**; Georgakilas, V.; Boukos, N.; Dallas, P.; Trapalis, C.; Giannelis, E. P., *Carbon*, 2007, vol. 45, pp. 1583-1585.
28. "Preparation of a water-dispersible carbon-silica composite derived from a silylated molecular precursor", **Bourlinos, A. B.**; Bakandritsos, A.; Zboril, R.; Karakassides, M.; Trapalis, C., *Carbon*, 2007, vol. 45, pp. 1108-1111.
29. "Effect of magnetic nanoparticles to NMR and nuclear spin relaxation in liquid and solid hosts", Noginova N.; Weaver T.; King M.; **Bourlinos A. B.**; Giannelis E. P.; Atsarkin V. A., *Journal of Applied Physics*, 2007, vol. 101, 09C102 (3 pp).
30. "NMR and spin relaxation in systems with magnetic nanoparticles", Noginova N.; Weaver T.; King M.; **Bourlinos A. B.**; Giannelis E. P.; Atsarkin V. A., *Journal of Physics: Condensed Matter*, 2007, vol. 19, 076210 (10 pp).

31. "Synthesis, characterization and gas sorption properties of a molecularly-derived graphite oxide-like foam", **Bourlinos, A. B.**; Steriotis, Th. A.; Karakassides, M.; Sanakis, Y.; Tzitzios, V.; Trapalis, C.; Kouvelos, E.; Stubos, A., *Carbon*, 2007, vol. 45, pp. 852-857.
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33. "Synthesis and characterization of a  $\pi$ -conjugate, covalent layered network derived from condensation polymerization of the 4,4'-bipyridine-cyanuric chloride couple", **Bourlinos, A. B.**; Dallas, P.; Sanakis, Y.; Stamopoulos, D.; Trapalis, C.; Niarchos, D., *European Polymer Journal*, 2006, vol. 42, pp. 2940-2948.
34. "Functionalized carbon nanotubes: synthesis of meltable and amphiphilic derivatives", **Bourlinos, A. B.**; Georgakilas, V.; Tzitzios, V.; Boukos, N.; Herrera, R.; Giannelis E. P., *Small*, 2006, vol. 2, pp. 1188-1191.
35. "Surface functionalized nanoparticles with liquid-like behavior: the role of the constituent components", **Bourlinos, A. B.**; Giannelis, E. P.; Zhang, Q.; Archer, L. A.; Floudas, G.; Fytas, G., *The European Physical Journal E*, 2006, vol. 20, pp. 109-117.
36. "A graphite oxide-like carbogenic material derived from a molecular precursor", **Bourlinos, A. B.**; Giannelis, E. P.; Sanakis, Y.; Bakandritsos, A.; Karakassides, M.; Gjoka, M.; Petridis, D., *Carbon*, 2006, vol. 44, pp. 1906-1912.
37. "Functionalized ZnO nanoparticles with liquid-like behaviour and their photoluminescence properties", **Bourlinos, A. B.**; Stassinopoulos, A.; Anglos, D.; Herrera, R.; Anastasiadis, S. H.; Petridis, D.; Giannelis, E. P., *Small*, 2006, vol. 2, pp. 513-516.
38. "Facile synthesis of capped  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> and Fe<sub>3</sub>O<sub>4</sub> nanoparticles", **Bourlinos, A. B.**; Bakandritsos, A.; Georgakilas, V.; Tzitzios, V.; Petridis, D., *Journal of Materials Science*, 2006, vol. 41, pp. 5250-5256.
39. "Luminescence quenching of dyes by oxygen in core-shell soft-sphere ionic liquids", Han, B.-H.; Winnik, M. A.; **Bourlinos, A. B.**; Giannelis, E. P., *Chemistry of Materials*, 2005, vol. 17, pp. 4001-4009.

40. "Functionalized nanostructures with liquid-like behavior: expanding the gallery of available nanostructures", **Bourlinos, A. B.**; Chowdhury, S. Ray; Herrera, R.; Jiang, D. D.; Zhang, Q.; Archer, L. A.; Giannelis, E. P., *Advanced Functional Materials*, 2005, vol. 15, pp. 1285-1290.
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42. "One-pot borohydride synthesis of magnetically modified lepidocrocite", **Bourlinos, A. B.**; Bakandritsos, A.; Petridis, D., *Chemistry Letters*, 2005, vol. 34, pp. 666-667.
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44. "Layered organosilicate nanoparticles with liquid-like behavior", **Bourlinos, A. B.**; Chowdhury, S. Ray; Jiang, D. D.; An, Y.-U.; Zhang, Q.; Archer, L. A.; Giannelis, E. P., *Small*, 2005, vol. 1, pp 80-82.
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50. "Clays as a host matrix in the synthesis of organic macrocycles", Georgakilas, V.; Gournis, D.; **Bourlinos, A. B.**; Karakassides, M. A.; Petridis, D., *Chemistry-A European Journal*, 2003, vol. 9, pp. 3904-3908.
51. "Graphite oxide: chemical reduction to graphite and surface modification with primary aliphatic amines and aminoacids", **Bourlinos, A. B.**; Gournis, D.; Petridis, D.; Szabó, T.; Szeri, A.; Dékány, I., *Langmuir*, 2003, vol. 19, pp. 6050-6055.
52. "Magnetic Fe<sub>2</sub>O<sub>3</sub>-Al<sub>2</sub>O<sub>3</sub> composites prepared by a modified wet impregnation method", Karakassides, M. A.; Gournis, D.; **Bourlinos, A. B.**; Trikalitis, P. N.; Bakas, T., *Journal of Materials Chemistry*, 2003, vol. 13, pp. 871-876.
53. "A novel route towards iron- and chromium-containing MCM-41 materials through melt-exchange of the template", **Bourlinos, A. B.**; Karakassides, M. A.; Gournis, D.; Georgakilas, V.; Moukarika, A., *Chemistry Letters*, 2003, vol. 32, pp. 38-39.
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55. "A simple route towards magnetically modified zeolites", **Bourlinos, A. B.**; Zboril, R.; Petridis, D., *Microporous & Mesoporous Materials*, 2003, vol. 58, pp. 155-162.
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66. "Interlayer formation of cyclobis(paraquat-o-phenylene) by the reaction of laponite-4,4'-bipyridinium intercalates with alpha, alpha'-dibromo-o-xylene: a one electron template synthesis", **Bourlinos, A. B.**; Petridis, D., *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, 2001, vol. 40, pp. 147-151.
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