

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)
- 2004-2010: Research associate at the Institute of Materials Science, NCSR Demokritos, Athens (Greece)

Research field: Chemistry of materials with emphasis to carbon nanostructures

Patents: 3

Publications (Peer-reviewed journals): 69

Average impact factor (2009): 3.914

Citations: 1169

h-INDEX: 20

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

List of Publications

1. "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. , pp. (asap article).
2. "Fullerol ionic fluids", Fernandes, N.; Dallas, P.; Rodriguez, R.; **Bourlinos, A. B.**; Georgakilas, V.; Giannelis, E. P., *Nanoscale*, 2010, vol. 2, pp. 1653-1656.
3. "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.
4. "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.
5. "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.
6. "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.
7. "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.
8. "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.
9. "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.
10. "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.

11. "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.
12. "Easy deposition of amorphous carbon films on glass substrates", **Bourlinos, A. B.**; Georgakilas, V.; Zboril, R., *Carbon*, 2008, vol. 46, pp. 1801-1804.
13. "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.
14. "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.
15. "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.
16. "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.
17. "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.
18. "Synthesis and characterization of PbI₂ 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.
19. "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.
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21. "Large-scale synthesis, size control, and anisotropic growth of γ -Fe₂O₃ 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.
22. "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.
23. "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).
24. "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.
25. "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.
26. "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.
27. "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).
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29. "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.
30. "Synthesis of tunable sized capped magnetic iron oxide nanoparticles highly soluble in organic solvents", Dallas, P.; **Bourlinos, A. B.**; Niarchos, D.; Petridis, D., *Journal of Materials Science*, 2007, vol. 42, pp. 4996-5002.

31. "Synthesis and characterization of a π -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.
32. "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.
33. "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.
34. "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.
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36. "Facile synthesis of capped γ -Fe₂O₃ and Fe₃O₄ nanoparticles", **Bourlinos, A. B.**; Bakandritsos, A.; Georgakilas, V.; Tzitzios, V.; Petridis, D., *Journal of Materials Science*, 2006, vol. 41, pp. 5250-5256.
37. "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.
38. "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.
39. "Weakly solvated PEG-functionalized silica nanoparticles with liquid-like behavior", **Bourlinos, A. B.**; Chowdhury, S. Ray; Jiang, D. D.; Zhang, Q., *Journal of Materials Science*, 2005, vol. 40, pp. 5095-5097.
40. "One-pot borohydride synthesis of magnetically modified lepidocrocite", **Bourlinos, A. B.**; Bakandritsos, A.; Petridis, D., *Chemistry Letters*, 2005, vol. 34, pp. 666-667.

41. "Surface functionalized nanoparticles with liquid-like behavior", **Bourlinos, A. B.**; Herrera, R. A.; Chalkias, N.; Jiang, D. D.; Zhang, Q.; Archer, L. A.; Giannelis, E. P., *Advanced Materials*, 2005, vol. 17, pp. 234-237.
42. "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.
43. "A liquid derivative of 12-tungstophosphoric acid with unusually high conductivity", **Bourlinos, A. B.**; Raman, K.; Herrera, R.; Zhang, Q.; Archer, L. A.; Giannelis, E. P., *Journal of the American Chemical Society*, 2004, vol. 126, pp. 15358-15359.
44. "Shape fabrication of cotton-derived inorganic ultralight hollow ribbons", **Bourlinos, A. B.**; Bakandritsos, A.; Petridis, D., *Materials Research Innovations*, 2004, vol. 8, pp. 71-83.
45. "Engineering of silica monoliths and effect of clay doping on their properties", **Bourlinos, A. B.**; Jiang, D. D.; Das, R. N.; Giannelis, E. P., *Journal of Materials Chemistry*, 2004, vol. 14, pp. 1995-2000.
46. "Clay-organosiloxane hybrids: a potential route to cross-linked clay particles and fabrication of clay monoliths", **Bourlinos, A. B.**; Jiang, D. D.; Giannelis, E. P., *Chemistry of Materials*, 2004, vol. 16, pp. 2404-2410.
47. "Hydrophilic Co-Pt nanoparticles: synthesis, characterization and perspectives", **Bourlinos, A. B.**; Panagiotopoulos, I.; Niarchos, D.; Petridis, D., *Journal of Materials Research*, 2004, vol. 19, pp. 1227-1233.
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49. "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.
50. "Magnetic Fe₂O₃-Al₂O₃ 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.

51. "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.
52. "Shaped inorganic, organic and inorganic-organic composite shells from surface engineering of crystal templates", **Bourlinos, A. B.**; Petridis, D., *Journal of Materials Science*, 2003, vol. 38, pp. 959-963.
53. "A simple route towards magnetically modified zeolites", **Bourlinos, A. B.**; Zboril, R.; Petridis, D., *Microporous & Mesoporous Materials*, 2003, vol. 58, pp. 155-162.
54. "Side-chain modification of MCM-41 silica through the exchange of the surfactant template with charged functionalized organosiloxanes: an efficient route to valuable reconstructed MCM-41 derivatives", **Bourlinos, A. B.**; Karakostas, Th.; Petridis, D., *Journal of Physical Chemistry B*, 2003, vol. 107, pp. 920-925.
55. "Shape fabrication of millimeter sized metal containing carboxymethyl cellulose hollow capsules", **Bourlinos, A. B.**; Petridis, D., *Chemical Communications*, 2002, pp. 2788-2789.
56. "Surface modification of ultrafine magnetic iron oxide particles", **Bourlinos, A. B.**; Bakandritsos, A.; Georgakilas, V.; Petridis, D., *Chemistry of Materials*, 2002, vol. 14, pp. 3226-3228.
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58. "Environmental effect of MCM-41 mesoporous silica on solid thermochromic N-(5-chlorosalicylidene)aniline", Hadjoudis, E.; **Bourlinos, A. B.**; Petridis, D., *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, 2002, vol. 42, pp. 275-279.
59. "Low-temperature water-gas shift reaction over Au/CeO₂ catalysts", Andreeva, D.; Idakiev, V.; Tabakova, T.; Ilieva, L.; Falaras, P.; **Bourlinos, A. B.**; Travlos, A., *Catalysis Today*, 2002, vol. 72, pp. 51-57.
60. "Exchange resins in shape fabrication of hollow inorganic and carbonaceous-inorganic composite spheres", **Bourlinos, A. B.**; Boukos, N.; Petridis, D., *Advanced Materials*, 2002, vol. 14, pp. 21-24.
61. "Magnetite and cobalt ferrite based clay composites", **Bourlinos, A. B.**; Devlin, E.; Boukos, N.; Simopoulos, A.; Petridis, D., *Clay Minerals*, 2002, vol. 37, pp. 135-141.

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64. "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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68. "Synthesis and characterization of copper containing mesoporous silicas", Karakassides, M. A.; **Bourlinos, A. B.**; Petridis, D.; Guèrènte, L. C.; Labbè, P., *Journal of Materials Chemistry*, 2000, vol. 10, pp. 403-408.
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