

- biomimetic chitosan/reduced graphene oxide composite films. *J Mater Chem* 20: 9032-9036.
21. Yin H, Ma Q, Zhou Y, Ai S, Zhu L, et al. (2010) Electrochemical behavior and voltammetric determination of 4-aminophenol based on graphene-chitosan composite film modified glassy carbon electrode. *Electrochimica Acta* 55: 7102-7108.
 22. He L, Wang H, Xia G, Sun J, Song R, et al. (2014) Chitosan/graphene oxide nanocomposite films with enhanced interfacial interaction and their electrochemical applications. *Appl Surf Sci* 314: 510-515.
 23. Mohammadi MR, Mohammadi F, Mohammadi D, Fray J, Khomamizadeh F, et al. (2011) Template-based growth of titanium dioxide nanorods by a particulate sol-electrophoretic deposition process. *Particuology* 9: 161-169.
 24. Fang M, Long J, Zhao W, Wang L and Chen G, et al. (2010) pH-responsive chitosan-mediated graphene dispersions. *Langmuir* 26: 16771-16774.
 25. Wan Y, Lin Z, Zhang D, Wang Y, Hou B, et al. (2011) Impedimetric immunosensor doped with reduced graphene sheets fabricated by controllable electrodeposition for the non-labelled detection of bacteria. *Biosens Bioelectron* 26: 1959-1964.
 26. Pati MK, Patojoshi P, Roy GS (2015) Fabrication and characterization of graphene based nanocomposite for electrical properties. *Adv Mater Phys Chem* 5: 22-30.
 27. Devi R, Relhan S, Pundir CS (2013) Construction of a chitosan/polyaniline/graphene oxide nanoparticles/polypyrrole/Au electrode for amperometric determination of urinary/plasma oxalate. *Sensors Actuators B Chem* 186: 17-26.
 28. Li X, Zhou H, Wu WM, Wei S, Xu Y, et al. (2015) Studies of heavy metal ion adsorption on chitosan/sulfhydryl-functionalized graphene oxide composites. *J Colloid Interface Sci* 448: 389-397.
 29. Layek RK, Samanta S, Nandi AK (2012) Graphene sulphonic acid/chitosan nano biocomposites with tunable mechanical and conductivity properties. *Polymer* 53: 2265-2273.
 30. Jagiello J, Judek J, Zdrojek M, Aksienionek M, Lipinska L, et al. (2014) Production of graphene composite by direct graphite exfoliation with chitosan. *Mater Chem Phys* 148: 507-511.
 31. Krishnan D, Kim F, Luo J, Cruz-Silva R, Cote LJ, et al. (2012) Energetic graphene oxide: Challenges and opportunities. *Nano Today* 7: 137-152.
 32. Singh V, Joung D, Zhai L, Das S, Khondaker SI, et al. (2011) Graphene based materials: Past, present and future. *Prog Mater Sci* 56: 1178-1271.
 33. Malafaya PB, Silva GA, Reis RL (2007) Natural-origin polymers as carriers and scaffolds for biomolecules and cell delivery in tissue engineering applications. *Adv Drug Deliv Rev* 59: 207-233.
 34. Shelke NB, James R, Laurencin CT, Kumbar SG (2014) Polysaccharide biomaterials for drug delivery and regenerative engineering. *Polym Adv Technol* 25: 448-460.
 35. Kyzas GZ, Deliyanni EA, Matis KA (2014) Graphene oxide and its application as an adsorbent for wastewater treatment. *J Chem Technol Biotechnol* 89: 196-205.
 36. Travlou NA, Kyzas GZ, Lazaridis NK, Deliyanni EA (2013) Graphite oxide/chitosan composite for reactive dye removal. *Chem Eng J* 217: 256-265.
 37. Travlou NA, Kyzas GZ, Lazaridis NK, Deliyanni EA (2013) Functionalization of graphite oxide with magnetic chitosan for the preparation of a nanocomposite dye adsorbent. *Langmuir* 29: 1657-1668.
 38. Kyzas GZ, Travlou NA, Deliyanni EA (2014) The role of chitosan as nanofiller of graphite oxide for the removal of toxic mercury ions. *Colloids Surf B Biointerfaces* 113: 467-476.
 39. Kyzas GZ, Bikiaris DN, Seredych M, Bandosz TJ, Deliyanni EA, et al. (2014) Removal of dorzolamide from biomedical wastewaters with adsorption onto graphite oxide/poly (acrylic acid) grafted chitosan nanocomposite. *Bioresour Technol* 152: 399-406.
 40. Du J, Cheng HM (2012) The fabrication, properties and uses of graphene/polymer composites. *Macromol Chem Phys* 213: 1060-1077.
 41. Das TK, Prusty S (2013) Graphene-based polymer composites and their applications. *Polym Plast Technol Eng* 52: 319-331.
 42. Sun X, Sun H, Li H, Peng H (2013) Developing polymer composite materials: Carbon nanotubes or graphene. *Adv Mater Weinh Ger* 25: 5153-5176.
 43. Kim H, Abdala AA, MacOsco CW (2010) Graphene/polymer nanocomposites. *Macromolecules* 43: 6515-6530.
 44. Huang X, Qi X, Boey F, Zhang H (2012) Graphene-based composites. *Chem Soc Rev* 41: 666-686.
 45. Zhang X, Rajaraman BRS, Liu H, Ramakrishna S (2014) Graphene's potential in materials science and engineering. *RSC Adv* 4: 28987-29011.

46. Tjong SC (2014) Polymer composites with graphene nanofillers: Electrical properties and applications. *J Nanosci Nanotechnol* 14: 1154-1168.
47. Kuang D, Hu WB (2013) Research progress of graphene composites. *Wuji Cailiao Xuebao. J Inorg Mater* 28: 235-246.
48. Rinaudo M (2008) Main properties and current applications of some polysaccharides as biomaterials. *Polym Int* 57: 397-430.
49. Draget KI, Skjåk-Bræk G, Smidsrød O (1997) Alginate based new materials. *Int J Biol Macromol* 21: 47-55.