

Publications (Dr. Saurabh Srivastava, Dept. of APSH)

Journal Papers:

1. Electrochemical paper based cancer biosensor using iron oxide nanoparticles decorated PEDOT:PSS, S. Kumar, M. Umar, A. Saifi, S. Kumar, S. Augustine, **Saurabh Srivastava***, and B.D. Malhotra*, Available online 8 January 2019, Analytica Chimica Acta (Impact factor: 5.1).
2. Prospects of paper-based microfluidics in heavy metal ion detection using nanomaterials, A. Saifi, R.K. Chaudhari, **Saurabh Srivastava*** Accepted for publication, Nov 2018, Sensor Letters (Scopus indexed).
3. Electrochemical detection of Cardiac biomarker using Functionalized WO₃-RGO nanocomposite as an immunosensing platform, D. Sandil, **Saurabh Srivastava**, B.D. Malhotra, S.C. Sharma, N.K. Puri, Journal of Alloys and Compounds, accepted for publication (Impact factor: 3.133).
4. Biofunctionalized nanostructured tungsten trioxide based sensor for cardiac biomarker detection, D. Sandil, S. Kumar, K. Arora, **Saurabh Srivastava**, B.D. Malhotra, S.C. Sharma, N.K. Puri, Materials Letters, 186, 2017, 202-205 (Impact factor: 2.4)
5. Antibody conjugated metal nanoparticle decorated graphene sheets for a mycotoxin sensor, Saurabh Srivastava, V. Kumar, K. Arora, C. Singh, Md. A. Ali, N. K. Puri and B. D. Malhotra, RSC Advances, 6, 2016, 56518-56526 (Impact factor: 3.28)
6. Effect of low pressure hydrogen environment on crystallographic properties of PdO nanoparticles, K. Arora, D. Sandil, G. Sharma, **Saurabh Srivastava**, N. K. Puri, International Journal of Hydrogen Energy, 47, 2016, 22155–22161 (Impact factor: 3.5)
7. Highly sensitive protein functionalized nanostructured hafnium oxide based biosensing platform for non-invasive oral cancer detection, S. Kumar, S. Kumar, S. Tiwari, S. Augustine, **Saurabh Srivastava**, B.K. Yadav, B. D. Malhotra, Sens. Actuators B, 235, 2016, 1-10 (Impact factor: 4.75)
8. Protein conjugated carboxylated gold@ reduced graphene oxide for aflatoxin B1 detection, **Saurabh Srivastava**, S. Abraham, C. Singh, Md A. Ali, A. Srivastava, G. Sumana, and Bansi D. Malhotra. RSC Adv. 5, 2015, 5406-5414 (Impact factor: 3.28)
9. Reduced graphene oxide modified smart conducting paper for cancer biosensor, S. Kumar, S. Kumar, **Saurabh Srivastava**, B.K. Yadav, S.H. Lee, J.G. Sharma, D.C. Doval, B.D. Malhotra, Biosens Bioelectron, 73, 2015, 114-122 (Impact factor: 7.47)
10. Protein Functionalized Carbon Nanotubes-based Smart Lab-on-a-Chip, Md. A. Ali, P.R. Solanki, **Saurabh Srivastava**, S. Singh, V. V. Agrawal, R. John, and B.D. Malhotra, ACS Appl. Mater. Interfaces, 7, 2015, 5837–5846 (Impact factor: 7.1)
11. Tyrosinase conjugated reduced graphene oxide based biointerface for bisphenol A sensor, K.K. Reza, Md. A. Ali, **Saurabh Srivastava**, V.V. Agrawal, A.M. Biradar, Biosens Bioelectron, 74, 2015, 644-651 (Impact factor: 7.47)

12. Mediator-free biosensor using chitosan capped CdS quantum dots for detection of total cholesterol, H. Dhyani, Md A. Ali, S. P. Pal, **Saurabh Srivastava**, P. R. Solanki, B.D. Malhotra, P. Sen, RSC Advances, 5, 2015, 45928-45934 (Impact factor: 3.28)
13. Biofunctionalized Nanostructured Zirconia for Biomedical Application: A Smart Approach for Oral Cancer Detection, S. Kumar , S. Kumar , S. Tiwari , **Saurabh Srivastava**, M. Srivastava , B.K. Yadav, S. Kumar , T.T. Tran, A. K. Dewan , A. Mulchandani , J.G. Sharma , S. Maji and B.D. Malhotra, Advanced Science, 2, 2015, 1500048 (Impact factor: 6)
14. Graphene oxide based biosensor for food toxin detection, **Saurabh Srivastava**, Md. A. Ali, S. Umrao, U. Parashar, A. Srivastava, G. Sumana, S. S. Pandey, S. Hayase, B. D. Malhotra, Applied Biochemistry and Biotechnology, 174, 2014, 960-970 (Impact factor: 1.6)
15. A surface functionalized nanopore titania integrated microfluidic biochip, Md. A. Ali, **Saurabh Srivastava**, K. Mondal, P. M. Chavhan, V. V. Agrawal, R. John, A. Sharma and Bansi D. Malhotra, Nanoscale, 6, 2014, 13958-13969 (Impact factor: 7.76)
16. Reduced graphene oxide–titania based platform for label-free biosensor, P. R. Solanki, **Saurabh Srivastava**, Md. A. Ali, R. K. Srivastava, A. Srivastava and B. D. Malhotra, RSC Adv. 4, 2014, 60386-60396 (Impact factor: 3.28)
17. Chitosan-modified carbon nanotubes-based platform for low-density lipoprotein detection, Md. A. Ali, N. Singh, **Saurabh Srivastava**, V. V. Agrawal, R. John, M. Onoda, and Bansi D. Malhotra. Applied biochemistry and biotechnology, 174, 2014, 926-935 (Impact factor: 1.6)
18. Nanomaterials Based Biosensors for Food Toxin Detection, B. D. Malhotra, **Saurabh Srivastava**, Md. A. Ali, C. Singh, Applied Biochemistry and Biotechnology, 174, 2014, 880-896 (Impact factor: 1.6)
19. Protein-conjugated quantum dots interface: Binding kinetics and label-free lipid detection, Md. A. Ali[#], **Saurabh Srivastava**[#], M. K. Pandey, V. V. Agrawal, R. John and B. D. Malhotra, Analytical Chemistry, 86, 2014, 1710–1718 (Impact factor: 5.88) (#Equal contribution)
20. Nanostructured palladium-reduced graphene oxide platform for high sensitive, label free detection of a cancer biomarker, V. Kumar, **Saurabh Srivastava**, S. Umrao, R. Kumar, G. Nath, G. Sumana, P. S. Saxena, A. Srivastava, RSC Advances, 4, 2014, 2267-2273 (Impact factor: 3.28)
21. Biofunctionalized carbon nanotubes platform for biomedical applications, K. K. Reza, **Saurabh Srivastava**, S. K. Yadav and A. M. Biradar, Materials Letters, 126, 2014, 126-130 (Impact factor: 2.4)
22. Lipid-lipid interactions in aminated reduced graphene oxide interface for biosensing application, Md. A. Ali, K. Reza, **Saurabh Srivastava**, V. V. Agrawal, R. John and B. D. Malhotra, Langmuir, 30, 2014, 4192–4201 (Impact factor: 3.99)
23. Mesoporous silica particle embedded functional graphene oxide as an efficient platform for urea biosensing, S. Abraham, V. Ciobota, **Saurabh Srivastava**, S. K. Srivastava, R. K. Singh, J. Dellith, B.D. Malhotra, M. Schmitt, J. Popp and A. Srivastava, Analytical Methods, 6, 2014, 6711-6720 (Impact factor: 1.9)
24. Electrophoretically deposited reduced graphene oxide platform for food toxin detection, **Saurabh Srivastava**, V. Kumar, Md. A. Ali, P. R. Solanki, A. Srivastava, G. Sumana, P. S. Saxena, A. G. Joshi, B. D. Malhotra, Nanoscale, 5, 2013, 3043-51 (Impact factor: 7.76)

25. Mediator-free microfluidics biosensor based on titania–zirconia nanocomposite for urea detection, **Saurabh Srivastava**, Md. A. Ali , P. R. Solanki, P. M. Chavhan, M. K. Pandey, A. Mulchandani, A. Srivastava, B. D. Malhotra, RSC Advances, 3, 2013, 228-235 (Impact factor: 3.28)
26. Carboxylated multiwalled carbon nanotubes based biosensor for aflatoxin detection, **Saurabh Srivastava**, C. Singh, Md. A. Ali, T. K. Gupta, G. Sumana, A. Srivastava, R. B. Mathur and B. D. Malhotra, Sensors & Actuators B, 185, 2013, 258–264 (Impact factor: 4.75) (*Equal contribution)
27. Highly efficient bienzyme functionalized nanocomposite-based microfluidics biosensor platform for biomedical application, Md. A Ali, **Saurabh Srivastava**, P. R. Solanki, V. Reddy, V. V. Agrawal, C. G. Kim, R. John and B. D. Malhotra, Scientific Reports, 3, 2013, 2661 (Impact factor: 5.2)
28. Magnesium oxide grafted carbon nanotubes based impedimetric genosensor for biomedical application, M. K. Patel, Md. A. Ali, **Saurabh Srivastava**, V.V. Agrawal, S. G. Ansari and B. D. Malhotra, Biosensors and Bioelectronics, 50, 2013, 406–413 (Impact factor: 7.47)
29. Functionalized multilayered graphene platform for urea sensor, R.K. Srivastava, **Saurabh Srivastava**, T.N. Narayanan, B. D. Malhotra, R. Vajtai, P. M. Ajayan, A. Srivastava, ACS Nano, 6, 2012, 168-175 (Impact factor: 13.33)
30. Nanostructured anatase-titanium dioxide based platform for application to microfluidics cholesterol biosensor, Md. A. Ali, **Saurabh Srivastava**, P. R. Solanki, V. V. Agrawal, R. John, B. D. Malhotra, Applied Physics Letters, 101, 2012, 084105 (Impact factor: 3.14)
31. A self assembled monolayer based microfluidic sensor for urea detection, **Saurabh Srivastava**, P. R. Solanki, A. Kaushik, Md. A. Ali, A. Srivastava, B. D. Malhotra, Nanoscale, 3, 2011, 2971-2977 (Impact factor: 7.76)
32. A novel urea biosensor based on zirconia, G. Sumana, M. Das, **Saurabh Srivastava** and B. D. Malhotra, Thin Solid Films, 519, 2010, 1187–1191 (Impact factor: 1.76)
33. Graphene oxide–metal nanocomposites for cancer biomarker detection, Md. A. Ali, C. Singh, **Saurabh Srivastava**, P. Admane, V. V. Agrawal, G. Sumana, R. John, A. Panda, L. Dong, and B. D. Malhotra, RSC Advances, 7, 2017, 35982-35991 (Impact factor: 3.28).

Research Article in International Magazines / Book Chapters:

1. Carbon Nanotube Membrane Filters, A. Srivastava, **Saurabh Srivastava**, K. Kalaga, Springer Handbook of Nanomaterials (Heidelberg ,Germany), 2013, pp 1099-111, ISBN: 3642205941.

Conference Proceedings:

1. Fabrication of nanocrystalline CdS electrode via chemical bath deposition technique for application to cholesterol sensor, H. Dhyani, **Saurabh Srivastava**, A. Ali, B.D. Malhotra and P. Sen, Journal of Physics: Conference Series, 358, 2012, 012008h
2. Biosensors for food toxin detection: carbon nanotubes and graphene, B.D. Malhotra, **Saurabh Srivastava**, S. Augustine, Mater. Res. Soc. Symp. Proc., 1725, 2015, DOI: 10 . 155.7/opl. 2015