

Ayyappanpillai Ajayaghosh

Total Citations – 9632, H-index-51 (as of May 2017 according to ISI Web of Science)

List of Main Publications

1. Color-Tunable Cyano-Substituted Divinylene Arene Luminogens as Fluorescent pi-Gelators. F. Aparicio, S. Cherumukkil, A. Ajayaghosh* and L. Sánchez*, *Langmuir* 2016, 32, 284–289.
2. A Three-Photon Active Organic Fluorophore for Deep Tissue Ratiometric Imaging of Intracellular Divalent Zinc. D. S. Philips, S. Sreejith*, T. He, N. V. Menon, P. Anees, J. Mathew, S. Sajikumar, Y. Kang, M. C. Stuparu, H. Sun*, Y. Zhao* and A. Ajayaghosh*, *Chem. Asian J.* 2016, 11, 1523–1527.
3. Real Time Monitoring of Amino-thiol Level in Blood Using a Near-Infrared Dye Assisted Deep Tissue Fluorescence and Photoacoustic Bimodal Imaging. P. Anees, J. Joseph, S. Sreejith, N. V. Menon, Y. Kang, S. W. K. Yu, A. Ajayaghosh*, Y. Zhao*, *Chem. Sci.* 2016, 7, 4110–4116.
4. The Chemistry and Applications of π -Gels. S. Ghosh, V. K. Praveen, A. Ajayaghosh*, *Annu. Rev. Mater. Res.* 2016, 46, DOI: 10.1146/annurev-matsci-070115-031557.
5. Light Driven Mesoscale Assembly of a Coordination Polymeric Gelator into Flowers and Stars with Distinct Properties. R. D. Mukhopadhyay, V. K. Praveen, A. Hazra, T. K. Maji, A. Ajayaghosh*, *Chem. Sci.* 2015, 6, 6583–6591.
6. Book Chapter : “Metallosupramolecular Materials for Energy Applications: Light-Harvesting” V. K. Praveen, A. Ajayaghosh*, in *Functional Metallosupramolecular Materials*, J. G. Hardy, F. H. Schacher, (Eds.), RSC Smart Materials 2–15, 2015.
7. Pyridyl-Amides as a Multimode Self-assembly Driver for the Design of Stimuli Responsive Pi-Gelator. K. K. Kartha, V. K. Praveen, S. S. Babu, S. Cherumukkil, A. Ajayaghosh*, *Chem. Asian J.* 2015, 10, 2250–2256. (Part of Special Board Member Issue Published on the Occasion of 10th Anniversary of Chem. Asian J.)
8. Near-IR Squaraine Dye-Loaded Gated Periodic Mesoporous Organosilica for Photo-Oxidation of Phenol in a Continuous-Flow Device. P. Borah, S. Sreejith, P. Anees, N. V. Menon, Y. Kang, A. Ajayaghosh*, Y. Zhao*, *Science Advances* 2015, 1, e1500390.
9. Living Supramolecular Polymerization. R. D. Mukhopadhyay, A. Ajayaghosh*, *Science* 2015, 349, 241–242 (Perspective).
10. Fluorescence Imaging Assisted Photodynamic Therapy Using Photosensitizer-Linked Gold Quantum Clusters. L. V. Nair, S. S. Nazeer, R. S. Jayasree*, A. Ajayaghosh*, *ACS Nano* 2015, 9, 5825–5832.
11. Water as a Self-Erasable Security Marker on a Slippery Fluorescent Molecular Assembly. R. Thirumalai, R. D. Mukhopadhyay, V. K. Praveen, A. Ajayaghosh*, *Scientific Reports* 2015, 5, 9842.
12. Organic Donor-Acceptor Assemblies to Coaxial p–n Heterojunctions with High Photoconductivity. S. Prasanthkumar, S. Ghosh, V. C. Nair, A. Saeki, S. Seki, A. Ajayaghosh*, *Angew. Chem. Int. Ed.* 2015, 54, 946–950.
13. Detection of Nitroaromatic Explosives with Fluorescent Molecular Assemblies and pi-Gels. K. K. Kartha, A. Sandeep, V. K. Praveen, A. Ajayaghosh*, *Chem. Rec.* 2015, 15, 252–265 (Review).
14. Self-Assembled Near-Infrared Dye Nanoparticles as a Selective Protein Sensor by activation of a Dormant Fluorophore. P. Anees, S. Sreejith, A. Ajayaghosh*, *J. Am. Chem. Soc.* 2014, 136, 13233–13239.
15. Photoresponsive Metal-Organic Materials: Exploiting the Azobenzene Switch. R. D. Mukhopadhyay, V. K. Praveen, A. Ajayaghosh*, *Mater. Horiz.* 2014, 1, 572–576 (Minireview).
16. A Carbazole–Fluorene Molecular Hybrid for Quantitative Detection of TNT Using a Combined Fluorescence and Quartz Crystal Microbalance Method. K. K. Kartha, A. Sandeep, V. C. Nair, M. Takeuchi*, A. Ajayaghosh*, *Phys. Chem. Chem. Phys.* 2014, 16, 18896–18901.

17. Electrochemically Synthesized Partially Reduced Graphene Oxide Modified Glassy Carbon Electrode for Individual and Simultaneous Voltammetric Determination of Ascorbic Acid, Dopamine and Uric Acid. P. K. Aneesh, S. R. Nambiar, T. P. Rao*, A. Ajayaghosh, *Anal. Methods* 2014, 6, 5322–5330.
18. A Ratiometric Fluorescent Molecular Probe with Enhanced Two-Photon Response upon Zn²⁺ Binding for in vitro and in vivo Bioimaging. K. P. Divya, S. Sreejith, A. Pichandi, Y. Kang, Q. Peng, S. K. Maji, Y. Tong, H. Yu*, Y. Zhao*, P. Ramamurthy, A. Ajayaghosh*, *Chem. Sci.* 2014, 5, 3469–3474.
19. Cyclotriphosphazene Appended Porphyrins and Fulleropyrrolidine Complexes as Supramolecular Multiple Photosynthetic Reaction Centers: Steady and Excited States Photophysical Investigation. V. S. Nair, Y. Pareek, V. Karunakaran*, M. Ravikanth*, A. Ajayaghosh*, *Phys. Chem. Chem. Phys.* 2014, 16, 10149–10156. (Part of PCCP's 15th Anniversary Issue).
20. A Fluorescent Molecular Probe for the Identification of Zinc and Cadmium Salts by Excited State Charge Transfer Modulation. K. P. Divya, S. Savithri, A. Ajayaghosh*, *Chem. Commun.* 2014, 50, 6020–6022.
21. Synthesis of a Gold Atomic Cluster–Chitosan Nanocomposite Film Modified Gold Electrode for Ultra-Trace Determination of Mercury. P. K. Aneesh, S. R. Nambiar, T. P. Rao*, A. Ajayaghosh*, *Phys. Chem. Chem. Phys.* 2014, 16, 8529–8535.
22. Aligned 1-D Nanorods of a Pi-Gelator Exhibit Molecular Orientation and Excitation Energy Transport Different from Entangled Fiber Networks. K. Sakakibara, P. Chithra, B. Das, T. Mori, M. Akada, J. Labuta, T. Tsuruoka*, S. Maji, S. Furumi, L. K. Shrestha, J. P. Hill, S. Acharya*, K. Ariga*, A. Ajayaghosh*, *J. Am. Chem. Soc.* 2014, 136, 8548–8551.
23. Effect of the Bulkiness of the End Functional Amide Groups on the Optical, Gelation, and Morphological Properties of Oligo(p-phenylenevinylene) Pi-Gelators. S. S. Babu, V. K. Praveen, K. K. Kartha, S. Mahesh, A. Ajayaghosh*, *Chem. –Asian J.* 2014, 9, 1830–1840. (Highlighted by a “Cover Picture”).
24. Oligo(phenylenevinylene) Hybrids and Self-Assemblies: Versatile Materials for Excitation Energy Transfer. V. K. Praveen*, C. Ranjith, E. Bandini, A. Ajayaghosh*, N. Armaroli*, *Chem. Soc. Rev.* 2014, 43, 4222–4242. (Part of Themed Issue on Supramolecular Photochemistry Dedicated to Prof. N. J. Turro)
25. Functional Pi-Gelators and Their Applications. S. S. Babu, V. K. Praveen, A. Ajayaghosh*, *Chem. Rev.* 2014, 114, 1973–2129. (A Comprehensive Review on Chromophore Based Supramolecular Gelators).