

Materials List for:

Interfacial Molecular-level Structures of Polymers and Biomacromolecules Revealed via Sum Frequency Generation Vibrational Spectroscopy

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Materials

| Name | Company | Catalog Number | Comments |
|--|--|----------------|---|
| 1,2-dipalmitoyl-sn-glycero-3-phosphocholine (DPPC) | Avanti Polar Lipids, Inc. | 850355P-1g | |
| Anhydrous ethanol | Sinopharm Chemical Reagent Co., Ltd | 100092680 | ≥99.7% |
| CaF2 prism | Chengdu YaSi Optoelectronics Co., Ltd. | | |
| Calcium chloride anhydrous | Sinopharm Chemical Reagent Co., Ltd | 10005817 | ≥96.0% |
| deuterated DPPC (d-DPPC) | Avanti Polar Lipids, Inc. | 860345P-100mg | |
| Electromagnetic oven | Zhejiang Supor Co., Ltd | C21-SDHCB37 | |
| Langmuir-Blodgett (LB) trough | KSV NIMA Co., Ltd. | KN 2003 | |
| Lithium bromide anhydrous | Sinopharm Chemical Reagent Co., Ltd | 20056926 | |
| Milli-Q synthesis system | Millipore | | Ultrapure water |
| Plasma cleaner | Chengdu Mingheng Science&Technology Co., Ltd | PDC-MG | Oxygen plasma cleaning |
| Poly(2-hydroxyethyl methacrylate) (PHEMA) | Sigma-Aldrich Co., LLC. | 192066 MSDS | Mw = 300 000 |
| Polystyrene | Sigma-Aldrich Co., LLC. | 330345 MSDS | Mw = 48 kDa and Mn = 47 kDa |
| Silk cocoons | | | From Bombyx mori |
| Single complementary strand of oligonucleotide | Nanjing Genscript Biotechnology Co., Ltd. | H03596 | 5'-CGAAGGCTTCCAGCT-3' |
| Single strand of oligonucleotide | Nanjing Genscript Biotechnology Co., Ltd. | H04936 | 3ϕ-end modified by cholesterol-triethylene glycol(Chol-TEG) (5ϕ-GCTTCCGAAGGTCGA-3ϕ) |
| Sodium carbonate anhydrous | Sinopharm Chemical Reagent Co., Ltd | 10019260 | ≥99.8% |
| Spin-coater | Institute of Microelectronics of the Chinese Academy of Sciences | KW-4A | For the preparation of ploymer films |
| Step profiler | Veeco | DEKTAK 150 | For the measurement of film thickness |
| Sum frequency generation (SFG) vibrational spectroscopy system | EKSPLA | | A commercial picosecond SFG system |