Supplementary Information

Diazonium Salt-Based Surface-Enhanced Raman Spectroscopy Nanosensor: Detection and Quantitation of Aromatic Hydrocarbons in Water Samples

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KEYWORDS:

polynuclear aromatic hydrocarbon (PAH); surface-enhanced Raman spectroscopy (SERS); nanosensor; diazonium salt; surface functionalization; detection.

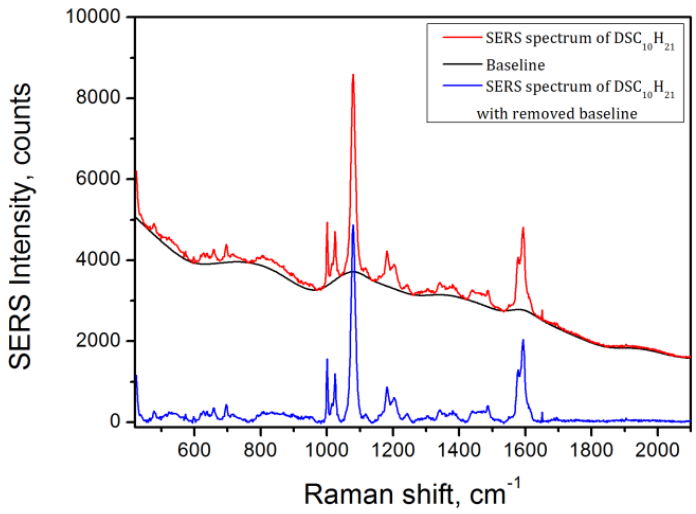

Figure S1: Example of the baseline correction procedure used in this study.

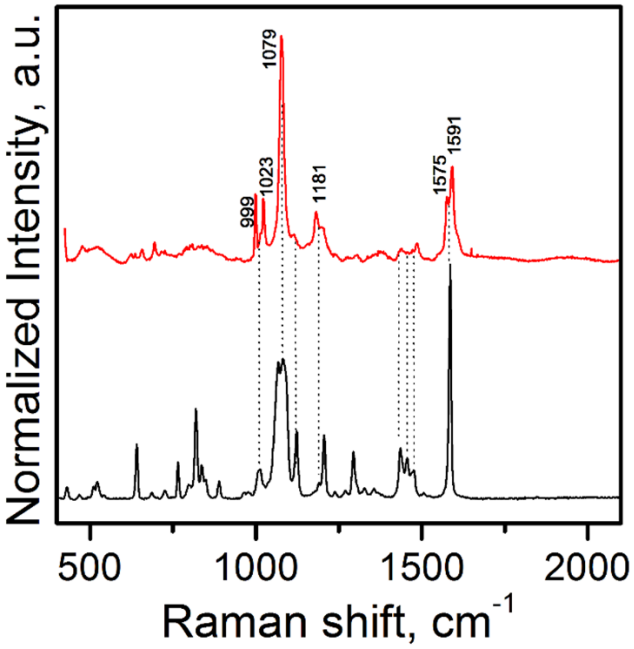

Figure S2: Comparison of Raman signatures (back spectrum) of selected aryldiazonium salt DS-$C_{10}H_{21}$ with SERS spectrum (in red) of their grafted layers.

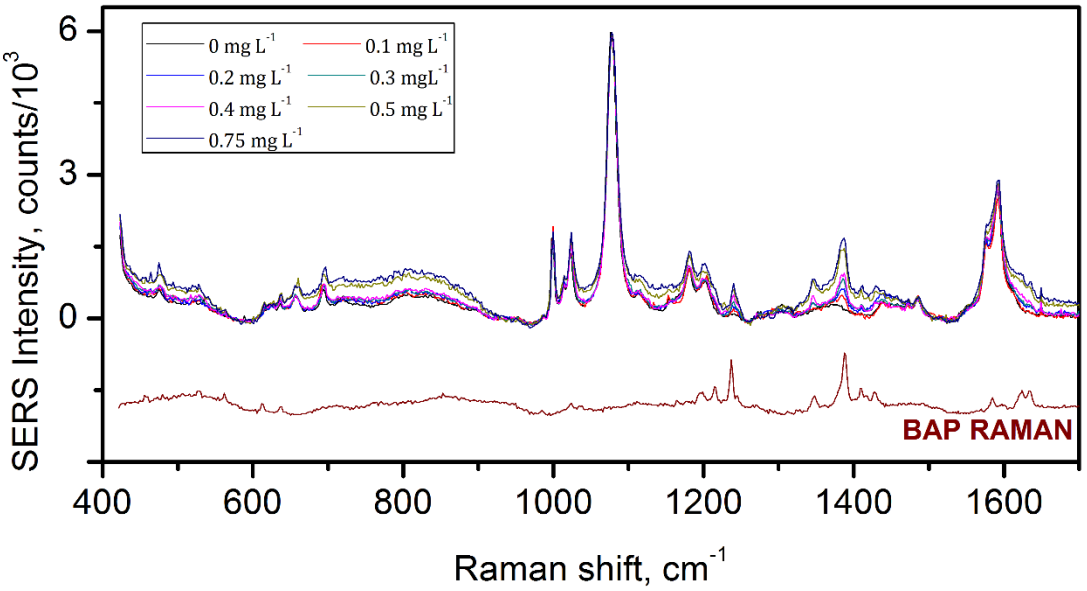

Figure S3: Detection of benzo[a]pyrene using a DS-$C_{10}H_{21}$ diazonium-salt-based nanosensor. Representation of the complete spectral range.

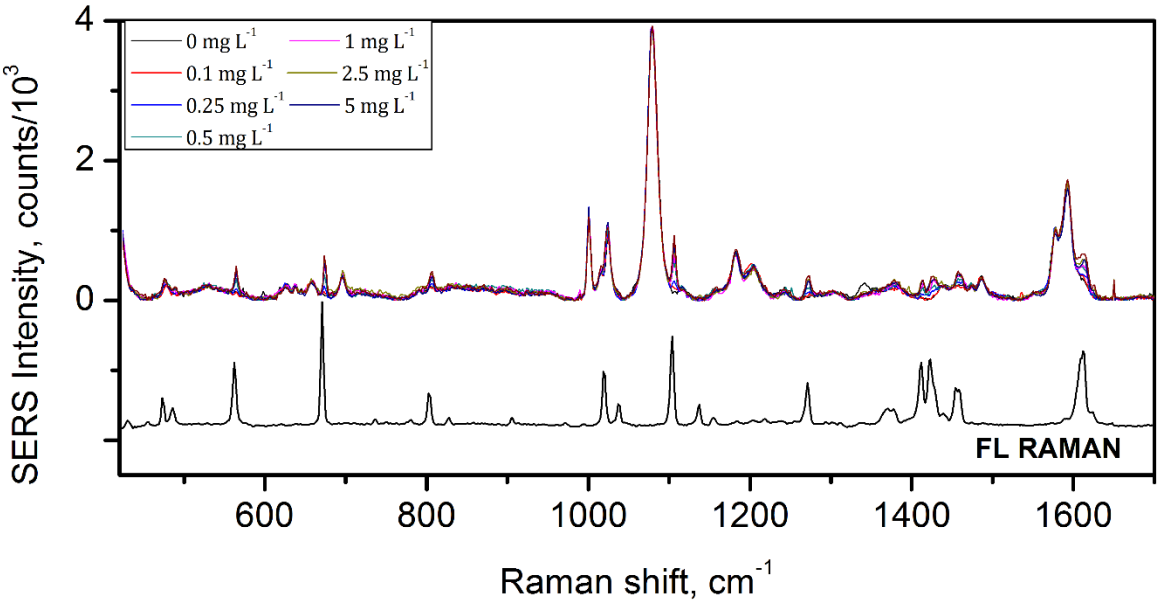

Figure S4: Detection of fluoranthene (FL) using a DS-$C_{10}H_{21}$ diazonium-salt-based nanosensor. Representation of the complete spectral range.

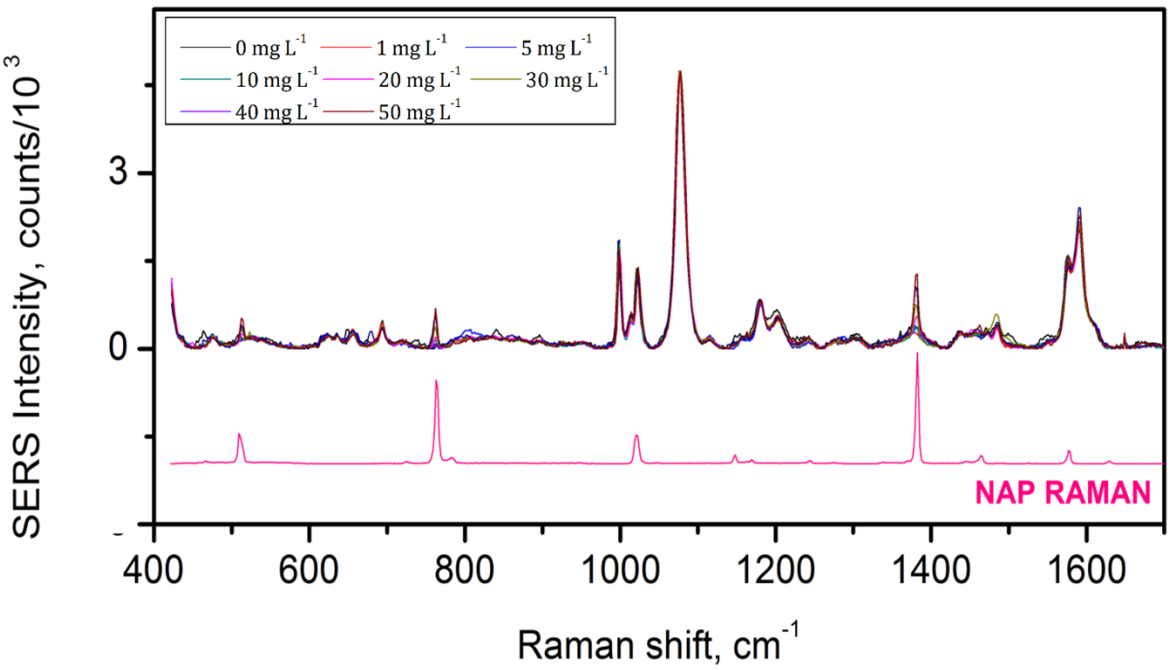

Figure S5: Detection of naphthalene (NAP) using a DS-$C_{10}H_{21}$ diazonium-salt-based nanosensor. Representation of the complete spectral range.