

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.

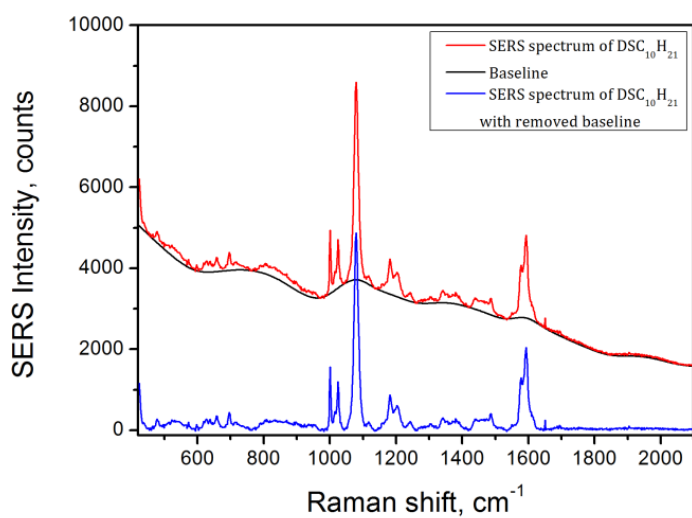


Figure S1: Example of the baseline correction procedure used in this study.

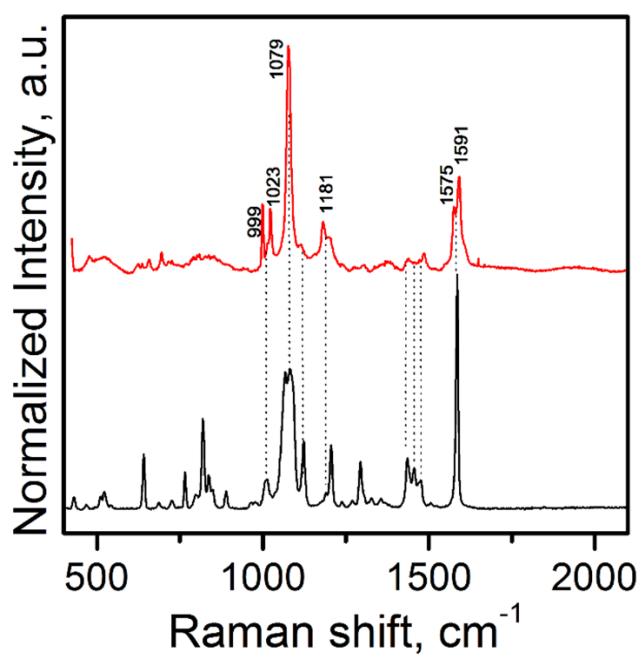


Figure S2: Comparison of Raman signatures (back spectrum) of selected aryldiazonium salt DS- $C_{10}H_{21}$ with SERS spectrum (in red) of their grafted layers.

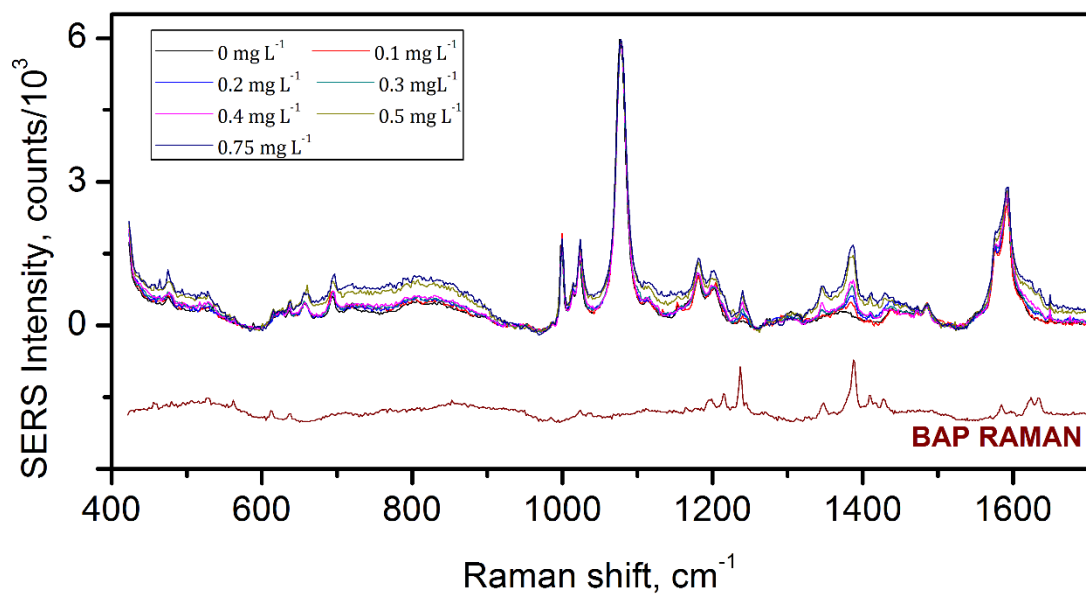


Figure S3: Detection of benzo[a]pyrene using a DS- $C_{10}H_{21}$ diazonium-salt-based nanosensor. Representation of the complete spectral range.

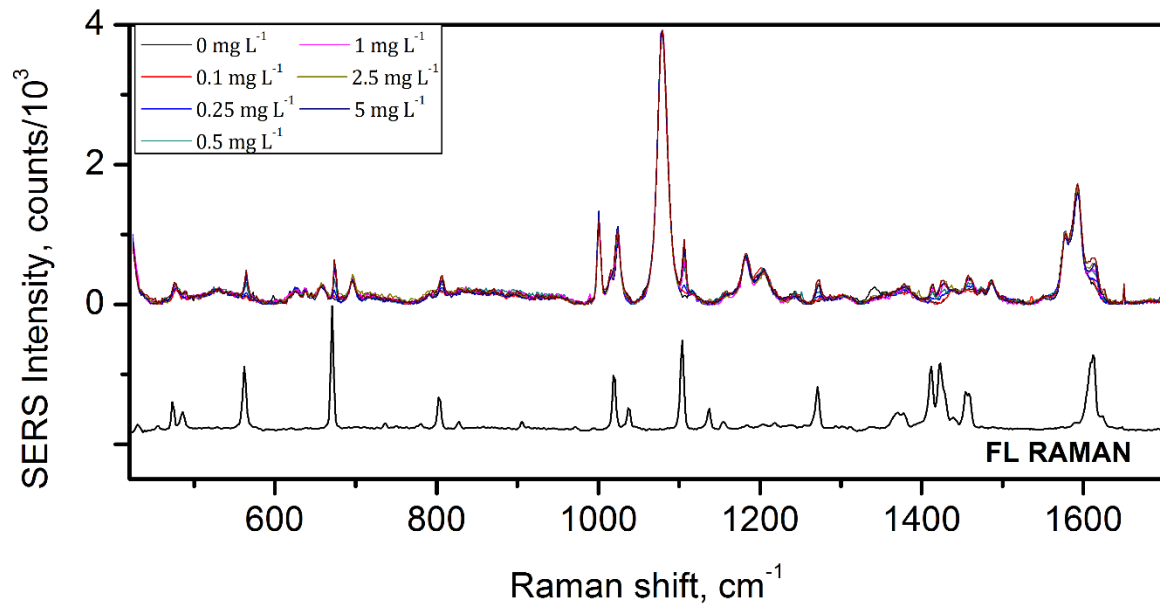


Figure S4: Detection of fluoranthene (FL) using a DS- $C_{10}H_{21}$ diazonium-salt-based nanosensor. Representation of the complete spectral range.

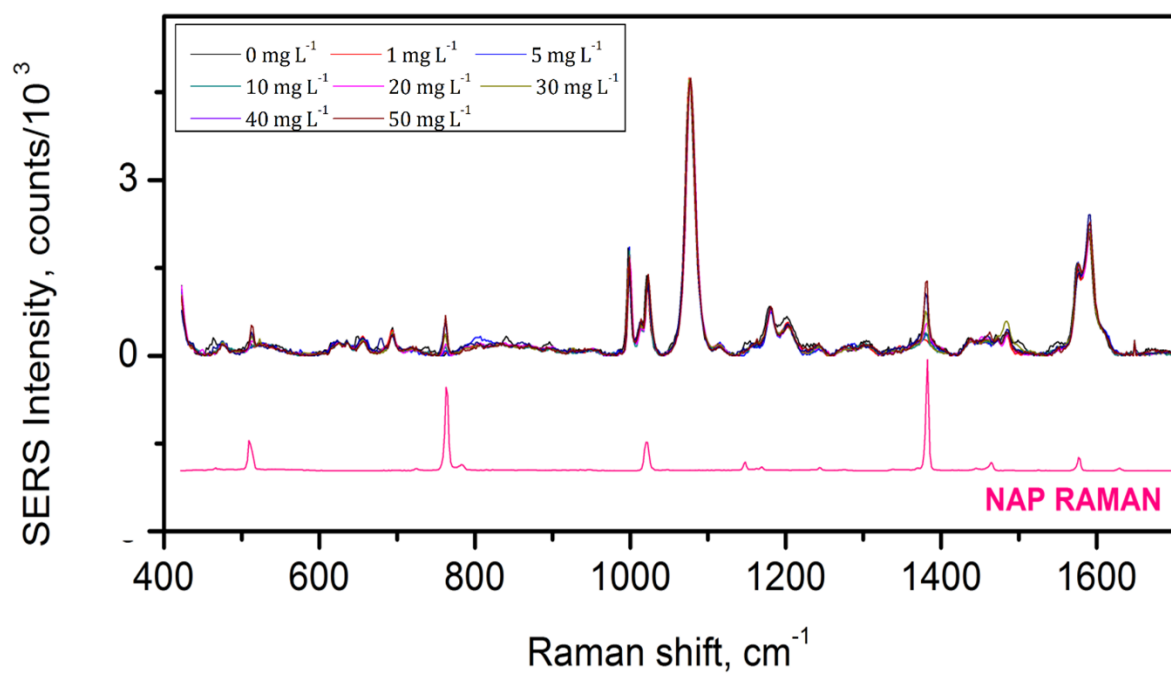


Figure S5: Detection of naphthalene (NAP) using a DS-C₁₀H₂₁ diazonium-salt-based nanosensor. Representation of the complete spectral range.