Supplementary Materials: Volatile Organic Compounds Sensing Using Optical Fibre Long Period Grating with Mesoporous Nano-Scale Coating

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Figure S1. TS of the LPG with infused CA[4] exhibited to acetone (**a**) LPG-L; (**b**) LPG-R; benzene (**c**) LPG-L; (**d**) LPG-R, chloroform (**e**) LPG-L; (**f**) LPG-R and toluene (**g**) LPG-L; (**h**) LPG-R.



Figure S2. TS of the LPG with infused CA[8] exhibited to acetone (**a**) LPG-L; benzene (**b**) LPG-L; (**c**) LPG-R; chloroform (**d**) LPG-L; (**e**) LPG-R and toluene (**f**) LPG-L; (**g**) LPG-R.



Figure S3. CA[8] sensor—spray paint experiment—TS (**a**) LPG-L and (**b**) LPG-R—initial one (black), final one (**red**) and 5 min (**green**), 30 min (**blue**) and 120 min (**pink**) after the paint placement; (**c**) dynamic change of the central wavelength during the whole experiment.



Figure S4. CA[4] sensor—spray paint experiment—TS (**a**) LPG-L and (**b**) LPG-R—initial one (**black**), final one (**red**) and 5 min (**green**), 30 min (**blue**) and 120 min (**pink**) after the paint placement.



Figure S5. CA[4] sensor—can paint experiment—TS LPG-L—initial one (**black**), final one (**red**) and 5 min (**green**), 30 min (**blue**) and 120 min (**pink**) after the paint placement.



Figure S6. CA[4] sensor—spray paint experiment—TS (a) LPG-L and (b) LPG-R—initial one (black), final one (red) and 5 min (green), 30 min (blue) and 120 min (pink) after the paint placement.



Figure S7. CA[4] sensor—can paint experiment—TS LPG-L—initial one (**black**), final one (**red**) and 5 min (**green**), 30 min (**blue**) and 120 min (**pink**) after the paint placement.



Figure S8. (**a**) Dynamic change of (**a**) CA[8] sensor during the spray paint experiment and (**b**) CA[4] sensor during the can paint experiment—LPG-L (**red**) and LPG-R (**black**).