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""4. ENHANCING THE PROTEIN FOLDING BY INTRODUCING AND ASSOCIATING HYDROPHOBIC AND STERIC EFFECTS IN MODIFIED SILICA-BASED POROUS GLASSES """""4.1. INCORPORATING FLUORO-BASED ORGANOSILANES IN TO FORM SUPERHYDROPHOBIC CROWDED ORGANICALLY MODIFIED SILICA BASED HOST MATRICES""; ""4.2. INCORPORATING PHOSPHONATE GROUPS IN HYDROPHOBIC SILICA NETWORK ""; ""5. EMERGING TECHNIQUES FOR A BETTER UNDERSTANDING OF PROTEIN INTERACTIONS AND CONFORMATIONS IN NANOPOROUS SOL-GEL GLASSES ""; ""5.1. IN-SITU MAS NMR""; ""5.2. FLUORO-RAMAN SPECTROSCOPY""; ""CONCLUSION ""; ""REFERENCES""; ""INDEX ""