

Development and characterization of magnetic SARS-CoV-2 peptide-imprinted polymers

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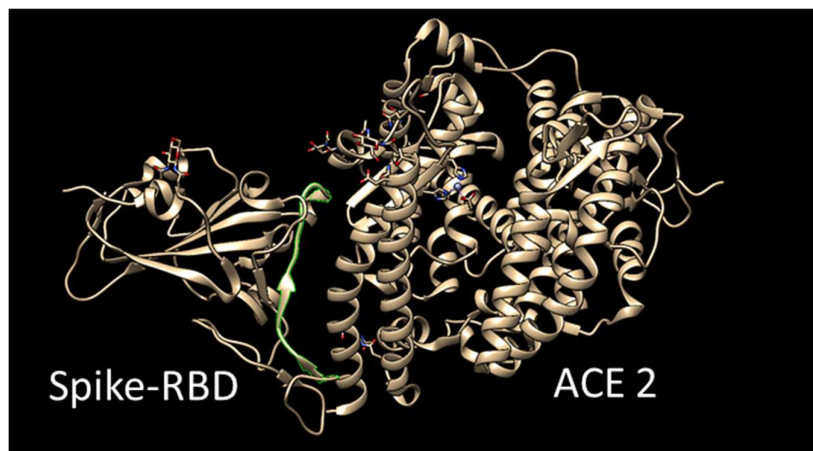


Figure S1. Protein complex representing interactions between receptor binding domain (RBD) of the spike protein specific to the SARS-CoV-2 with the ACE 2 receptor (PDB ID: 6M0J). The highlighted sequence (green) was chosen as the target template/epitope for imprinting.

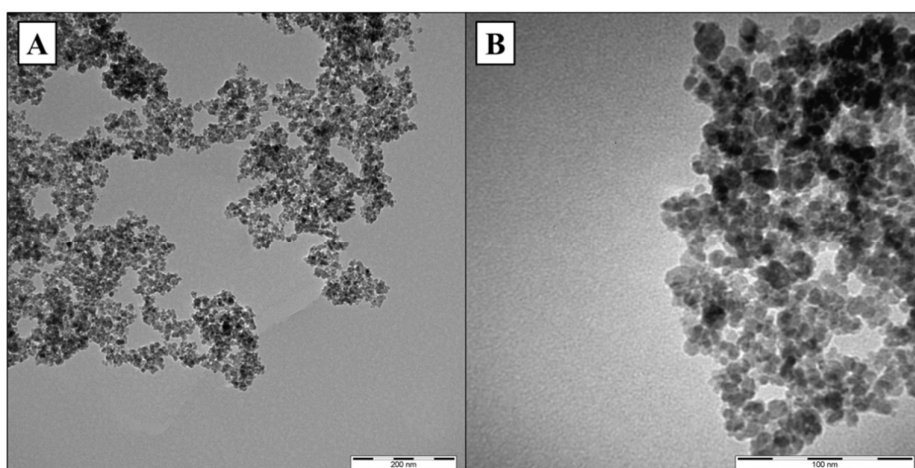


Figure S2. TEM micrographs of the prepared MNPs.

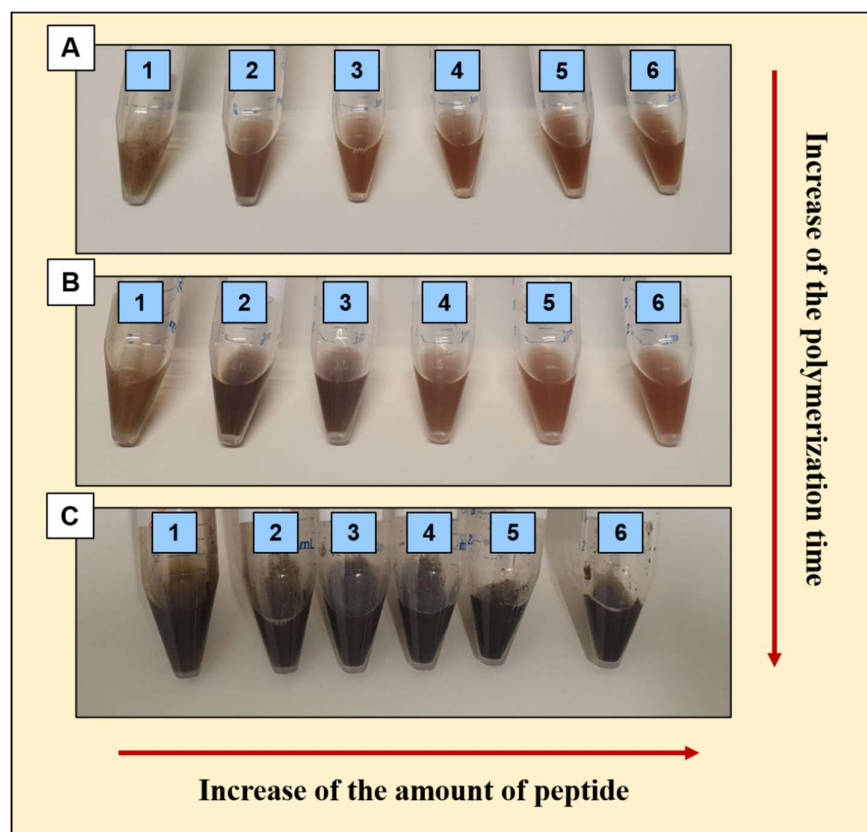


Figure S3. Photographs of the MNIPs/MMIPs with different amounts of peptides and prepared with different polymerization times. **A)** N°1 is MNIP-1, N°2 is MMIP-05-1, N°3 is MMIP-1-1, N°4 is MMIP-2-1, N°5 is MMIP-3-1 and N°6 is MMIP-4-1. **B)** N°1 is MNIP-2, N°2 is MMIP-05-2, N°3 is MMIP-1-2, N°4 is MMIP-2-2, N°5 is MMIP-3-2 and N°6 is MMIP-4-2. **C)** N°1 is MNIP-24, N°2 is MMIP-05-24, N°3 is MMIP-1-24, N°4 is MMIP-2-24, N°5 is MMIP-3-24 and N°6 is MMIP-4-24.

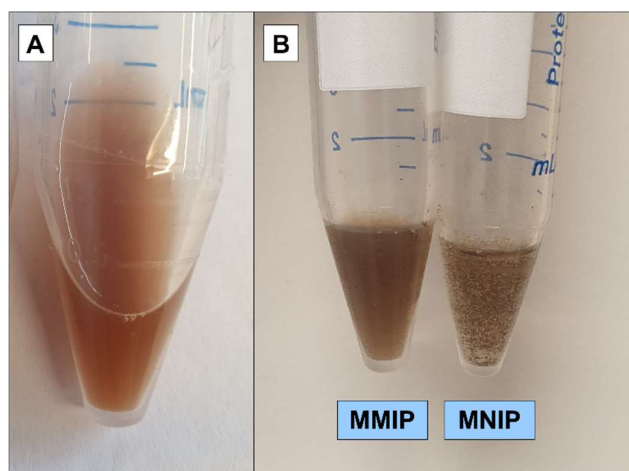


Figure S4. Photographs of the dispersion of **A)** MNPs and **B)** MMIP/MNIP.

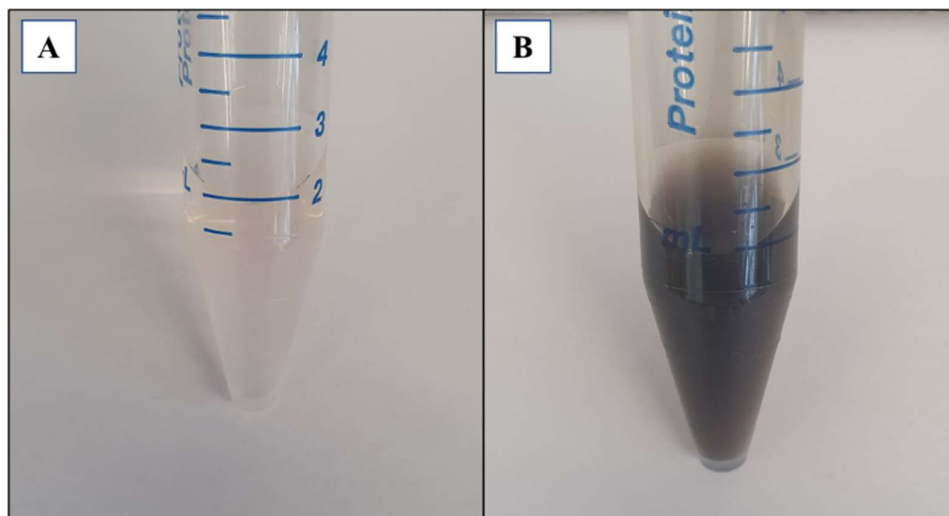


Figure S5. Photographs of **A)** dopamine and **B)** polydopamine solutions.

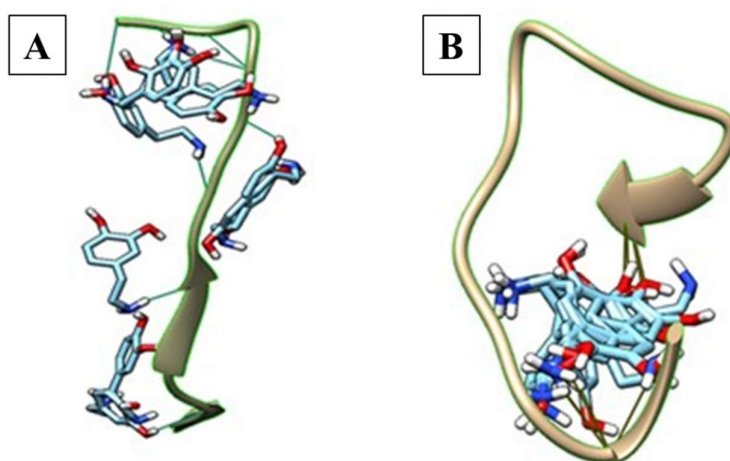


Figure S6. Representation of nine docked poses of dopamine in the binding energy range of **A)** - 3.2 to -3.4 kcal/mol with SARS-CoV-2 peptide and **B)** -3.6 to -4.0 kcal/mol with Zika virus peptide.