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(54) Title: CELL DISPLAY LIBRARIES

(57) Abstract: Eukaryotic cell display libraries for use in panning processes comprising expressed biomolecules for specific and selective binding and enrichment to solid material surfaces including, for example, metal, magnetic, and semiconducting surfaces. Display can be regulated. Peptide and protein display on yeast cells are preferred. Solid materials can be fabricated in the presence of cell display libraries which have been subjected to panning against the solid materials. Nanoparticles can be grown in the presence of the biomolecules from reactive precursors. The nanoparticles can show quantum confinement effects. Self-healing films can be prepared.

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