

Anticancer Applications of Mesoporous Silica Nanoparticles

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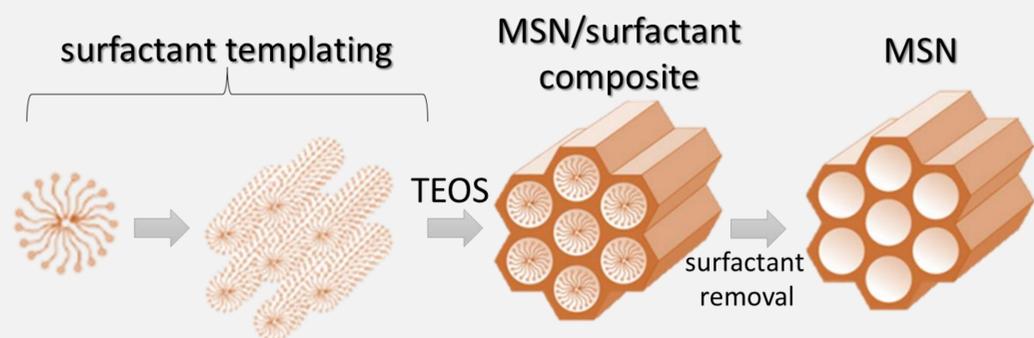
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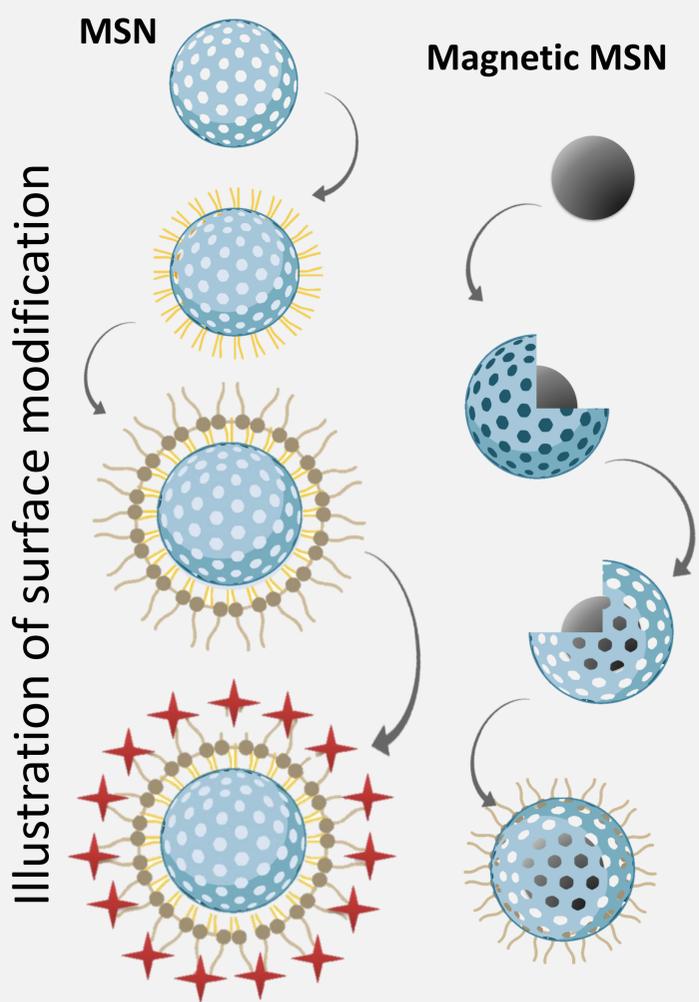
ABSTRACT

The capabilities in applying mesoporous silica nanoparticles (MSN) for the construction of different types of nanosystems for simultaneous cancer therapy and diagnostics are widely known in the scientific literature. Their specific characteristics allow devising a plethora of multifunctional nanostructures. MSNs can be loaded with different cargo molecules which can serve different purposes, such as cancer treatment, imaging, or sensing cancer-specific environment and biomolecules. The process of cargo release can be also governed by employing externally applicable stimuli or upon exposure to intratumoral conditions. The control over this process allows the application of MSNs as unique facilitators in cancer therapy, imaging and sensing.

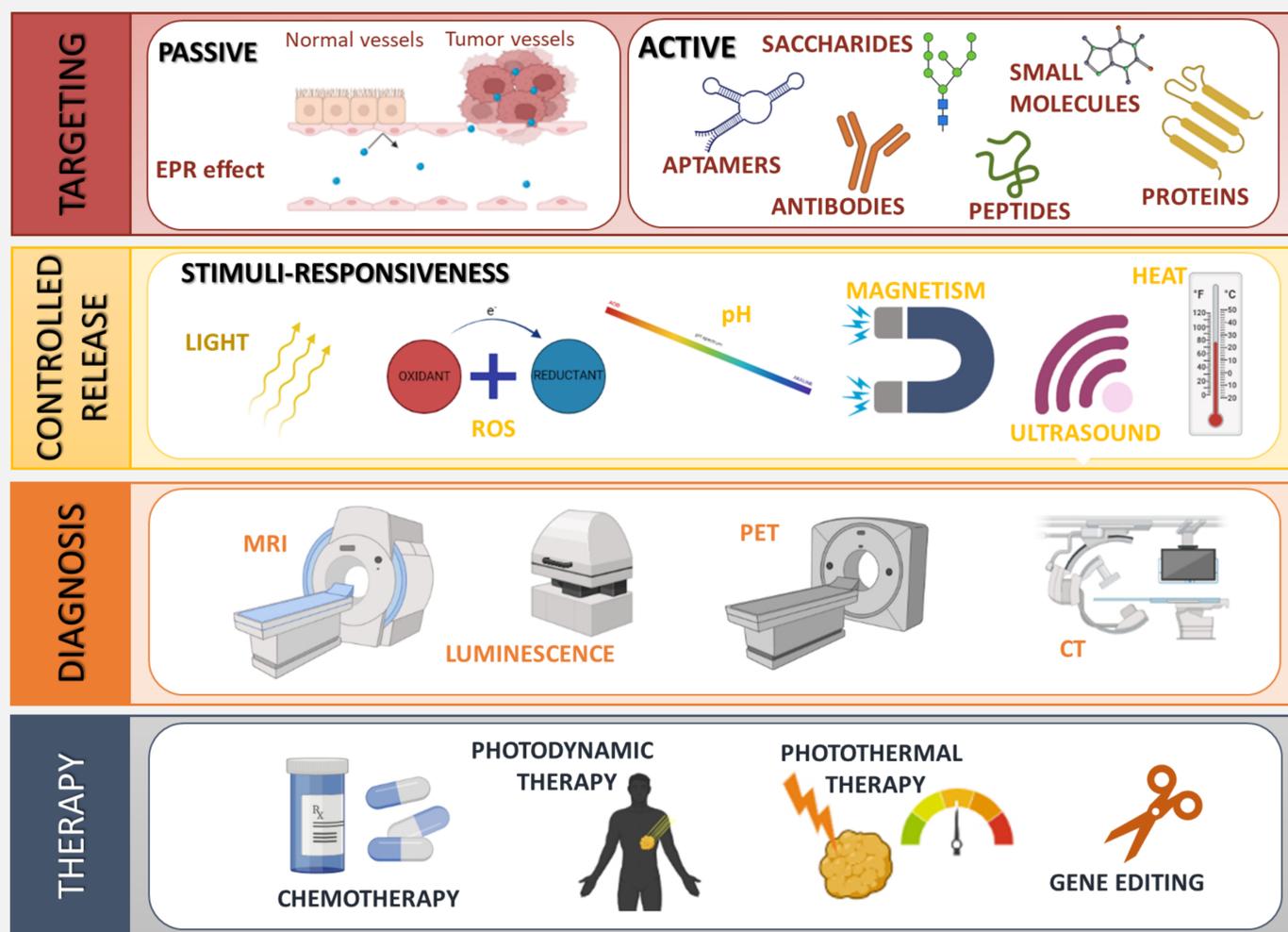
Synthesis



Functionalization



Application



RESEARCH

