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Autore	Chirico Giuseppe
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Gold Nanostars synthesis and functionalization with organic molecules -- 2. Physical properties of Gold Nanostars -- 3. Applications of gold nanostars: nanosensing, thermal therapy, delivery systems -- 4. Interactions of gold nanostars with cells.
Sommario/riassunto	This Brief focuses on the synthesis, functionalization techniques, optical properties and biomedical application of gold nanostars (GNS). Various facilities of gold nanostars synthesis as well as functionalization of GNS with PEG, organic dyes, bioactive compounds are discussed. The authors discuss physical origin of the Localized Surface Plasmon Resonances and the way the nano-environment affects them. The implication of the LSPR of gold nanostars surface enhanced Raman scattering is also discussed. The emphasis has been done on

the application of GNS for current and emerge needs of medicine, biology and pharmacy. Moreover, properties of gold nanostars as contrast agents for in vivo imaging and interaction of GNS with cells are also discussed in this Brief.
