



## Multifunctional Hybrid Nanoparticles for Photodynamic Therapy and Diagnosis

Guest Editor:

**Dr. Juan L. Vivero-Escoto**

Department of Chemistry, The  
Centre for Biomedical  
Engineering and Science,  
University of North Carolina at  
Charlotte, Charlotte, NC 28223,  
USA

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### Message from the Guest Editor

Photodynamic therapy (PDT) has evolved over the last century and has become a widely used medical tool having gained regulatory approval for the treatment of various diseases, such as cancer and macular degeneration. PDT is based on the activation of photosensitizers (PSs), which results in energy transfer cascades that ultimately yield cytotoxic reactive oxygen species that can render cell death. Hybrid nanoparticles designed with both inorganic and organic components have attracted significant attention in recent decades because they not only retain the beneficial features of both components but also gain additional synergistic performance. Hybrid nanomaterials containing gold, silver, silica, quantum dots, silicon, upconversion, or carbon-based nanoparticles as the core component can be modified in a modular fashion to render specific properties for the resultant nanoparticles such as target specificity or biodegradability that improve the outcome of PDT. This Special Issue will gather recent developments in the synthesis, characterization, and application of hybrid nanoparticles for photodynamic therapy and diagnosis.





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### **Prof. Dr. Shirley Chiang**

Department of Physics, University  
of California Davis, One Shields  
Avenue, Davis, CA 95616-5270,  
USA

## Message from the Editor-in-Chief

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*Nanomaterials* Editorial Office  
MDPI, St. Alban-Anlage 66  
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