



UPO UNIVERSITÀ DEL PIEMONTE ORIENTALE
DIPARTIMENTO DI SCIENZE E INNOVAZIONE TECNOLOGICA

EVENTI DiSIT

Seminario | Seminar

14-07-2023

15:00-16:00

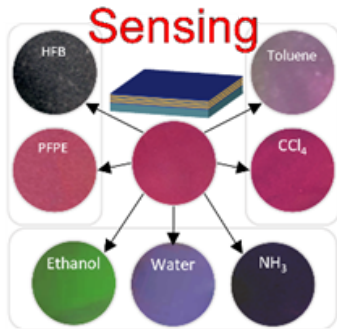
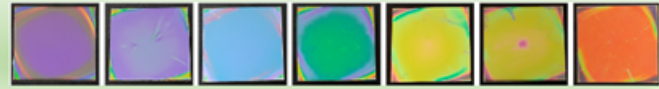
AULA 204

POLYMER AND HYBRID NANOSTRUCTURES FOR SUSTAINABLE PHOTONICS

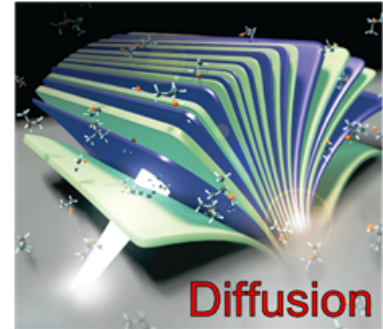
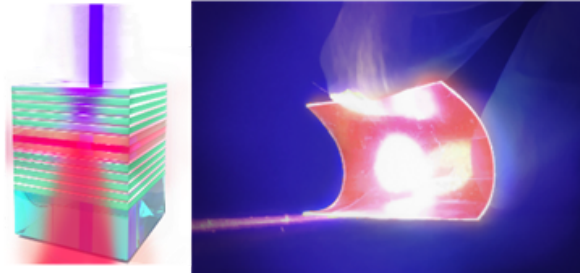
[Prof. Davide Comoretto](#)

Dipartimento di Chimica e Chimica Industriale, Università di Genova



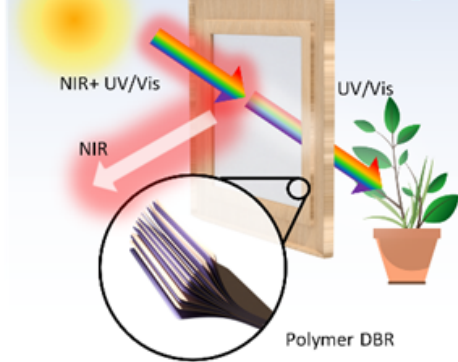


Fluorescence Control

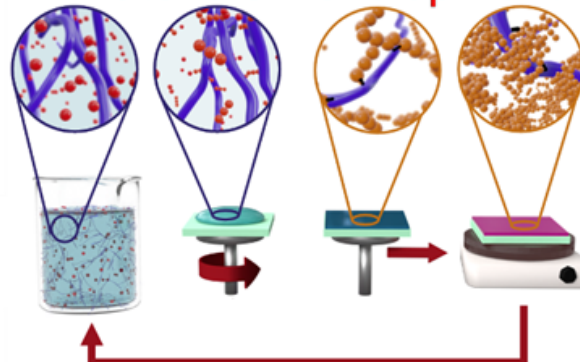


Diffusion

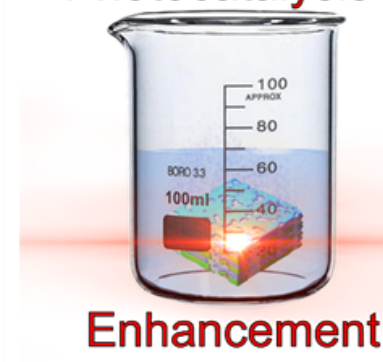
Thermal Shielding



Materials Development



Photocatalysis



Enhancement

Year by year, the importance of organic and hybrid highly ordered nanostructures in photonics is increasing. Polymers - even recycled or from renewable sources - represent an interesting alternative to more traditional metal oxides, being easily processable and allowing for light, free-standing and flexible structures able to address several sustainable development goals of the ONU 2030 agenda. In sensing, they allow for the preparation of label-free sensors for food degradation by products or for environmental monitoring. In the thermal shielding field, they would allow for thin, transparent films able to reduce heating by sunlight and to improve the sustainability of buildings or to keep the quality of foods/beverages. Mechanochromic photonic systems allow an easy read-out chromatic response to mechanical stimuli. Moreover, in fluorescence control and lasing, photonic crystals are fundamental towards all-organic photonics and polymer quantum electrodynamics providing fundamental hints to quantum technologies and polymer metamaterials. Finally, hybrid materials are of great interest in these regards as they combine the processability of polymers with the superior refractive index properties of inorganics.

EVENTO APERTO A: Docenti, Borsistis, Assegnisti, Dottorandi, Studenti, Esterni UNIUPO
SEMINARIO IN LINGUA: ITALIANO | ITALIAN

REGISTRAZIONE OBBLIGATORIA:
entro GIOVEDÌ 13 LUGLIO 2023 ORE 12.00 tramite [modulo Google](#)

