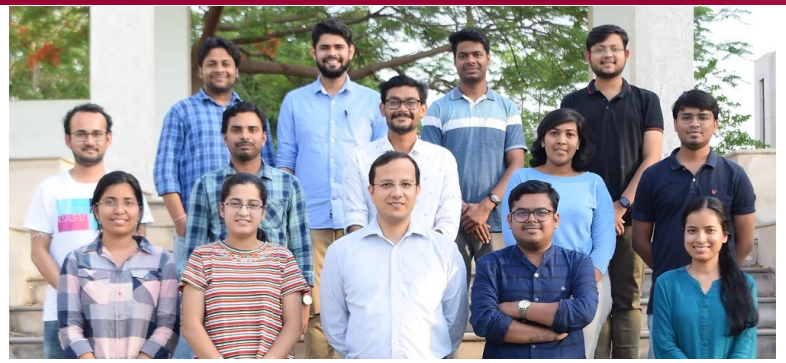
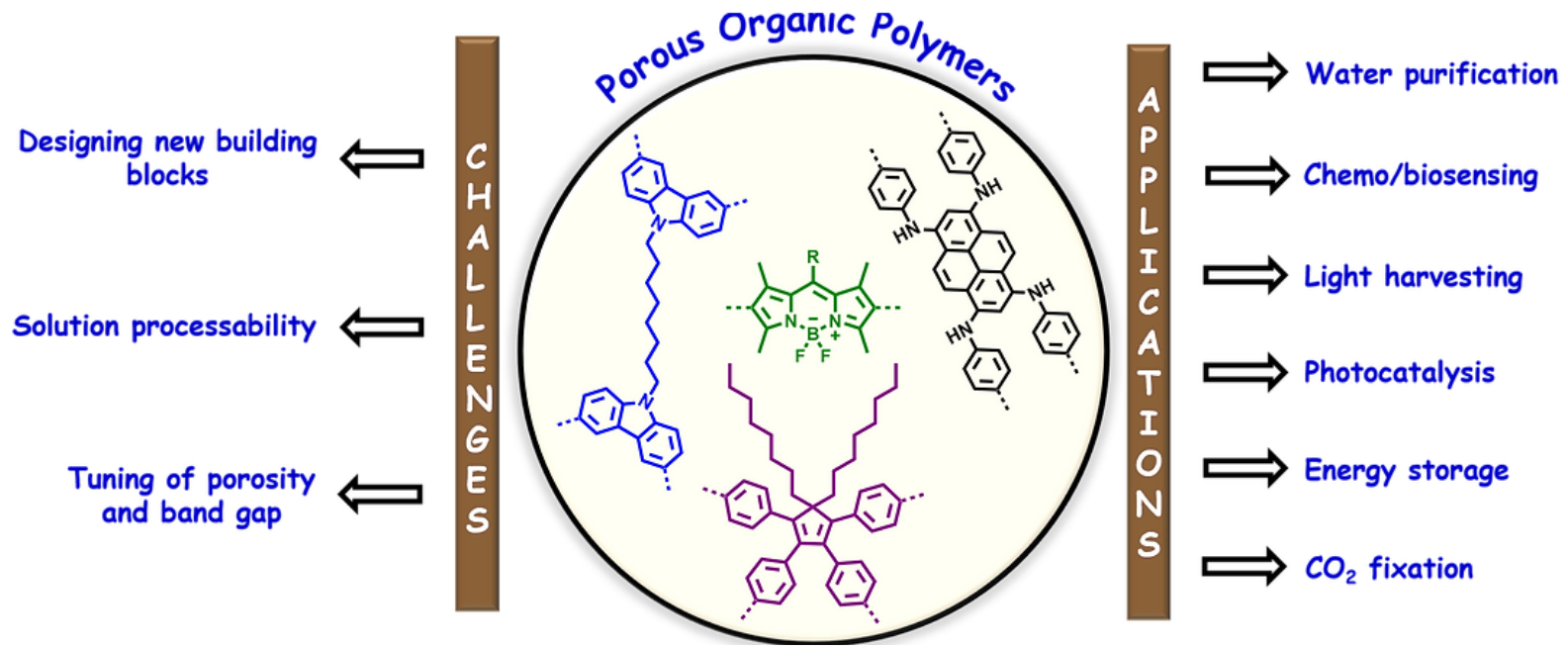
Functional Materials Laboratory



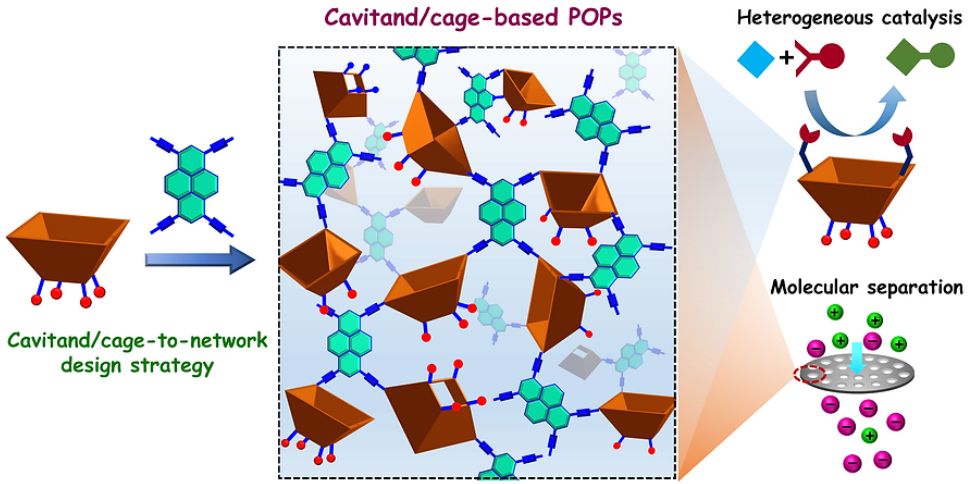
FML Functional Materials Lab

Abhijit Patra abhijit@iiserb.ac.in

Porous Organic Polymers



- Porous Organic Polymers
- Fluorescent materials
- Nanomaterials



Techniques: Absorption, Fluorescence, TCSPC, AFM, SEM, TEM, XPS, XRD, BET

Angew. Chem. Int. Ed. 2023, e202219083 (Just accepted)

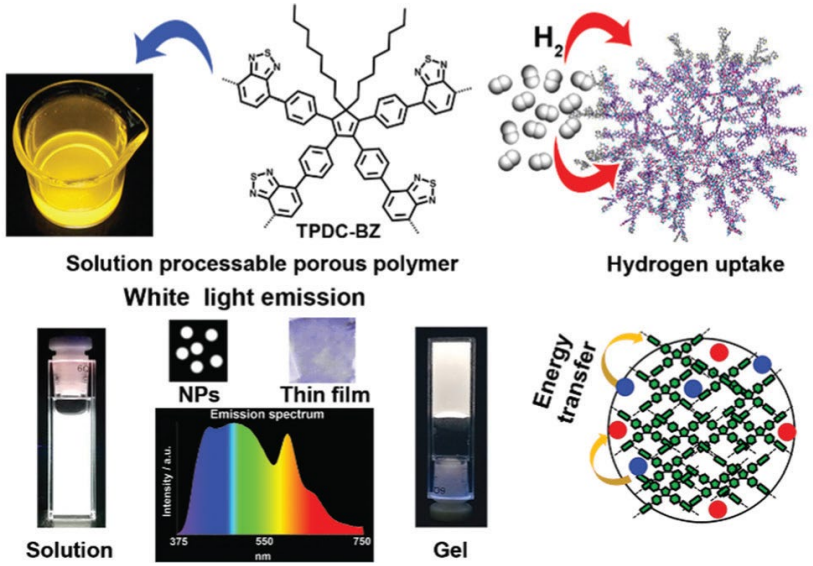
Chem. Commun. 2023,59, 2584 -2587

ACS Appl. Mater. Interfaces 2022, 14, 7369-7381

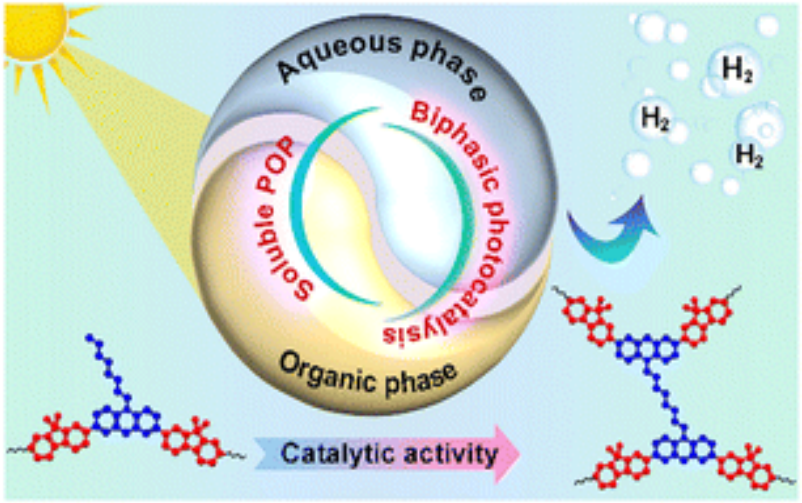
Chem. Mater. 2019, 31, 8440-8450

Porous Organic Polymers

Soluble Porous Organic Polymers

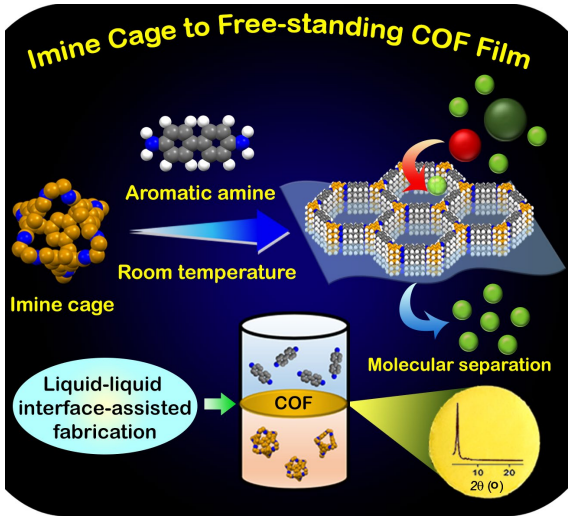


Chem. Commun. 2017, 53, 1257-1260

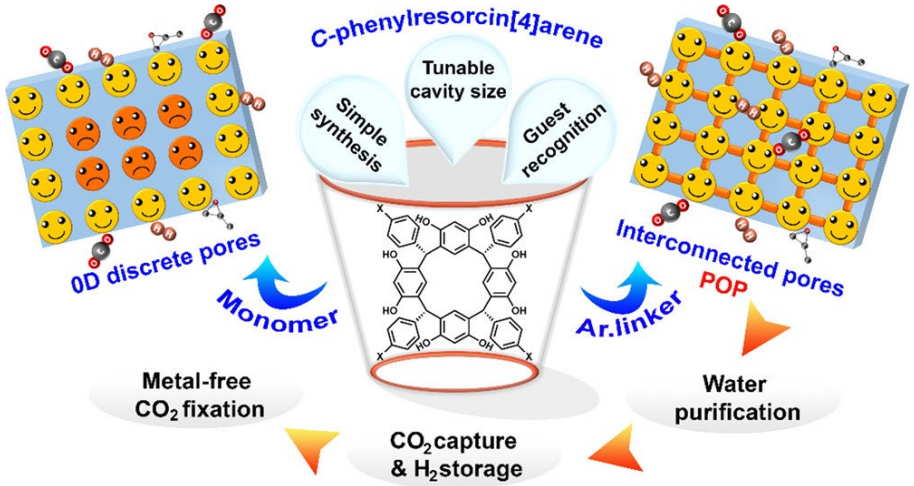


Chem. Commun. 2023,59, 2584-2587

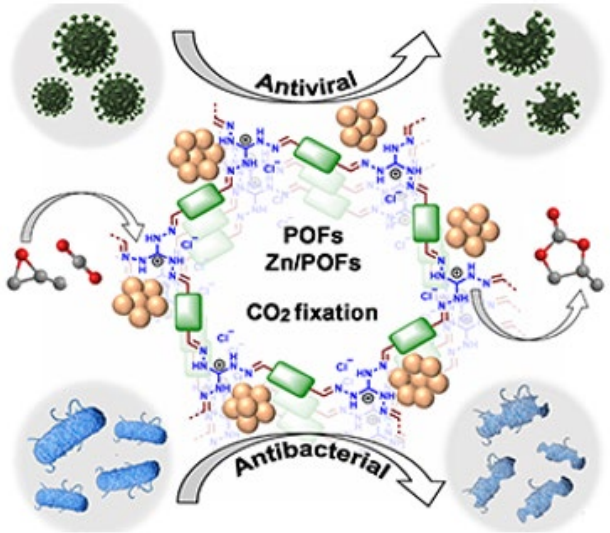
Solid Porous Materials



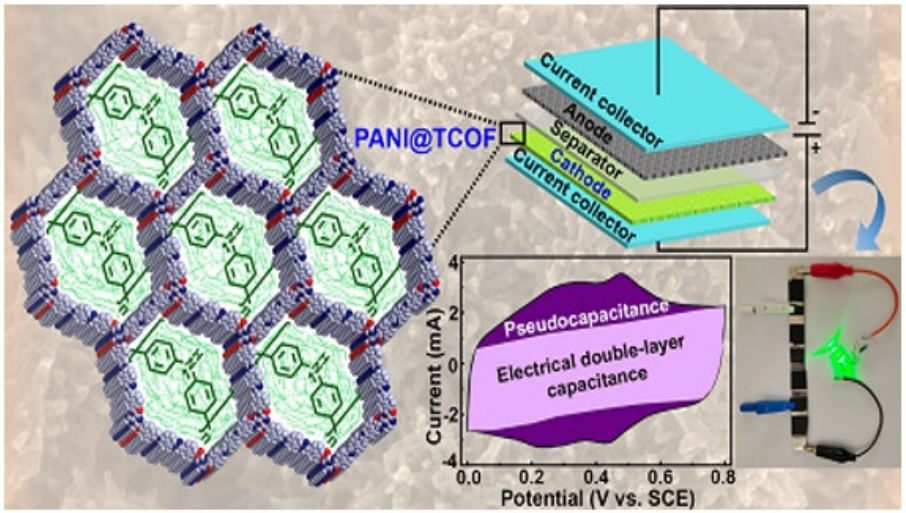
Angew. Chem. Int. Ed. 2023, e202219083



Chem. Mater. 2019, 31, 8440-8450



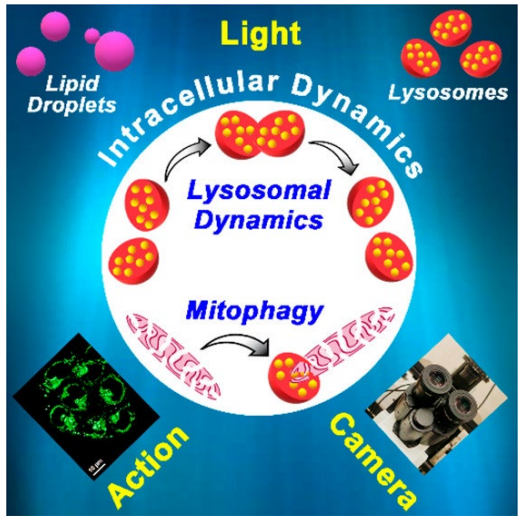
Chem. Sci. 2020, *11*, 7910-7920



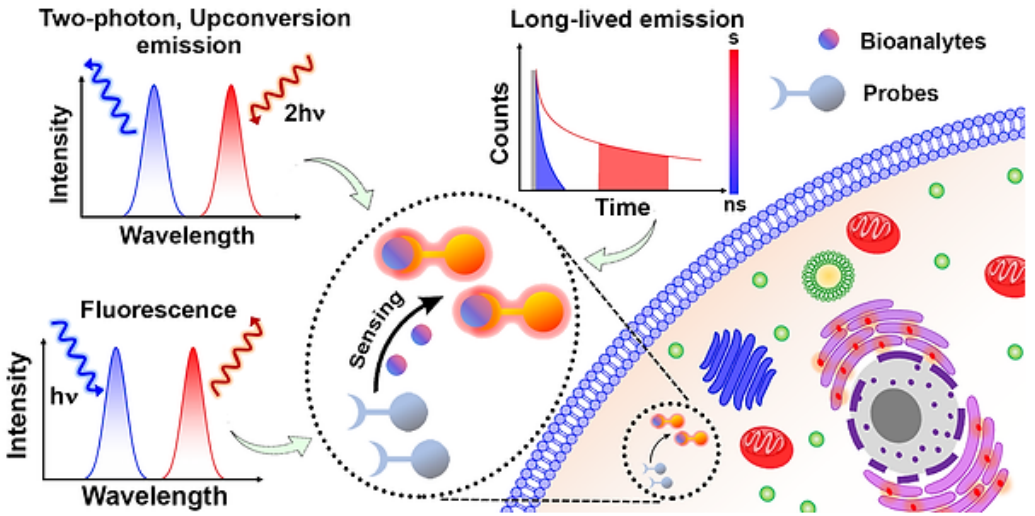
Chem Asian J. 2021, 16, 158-164

Small Organic Luminogens

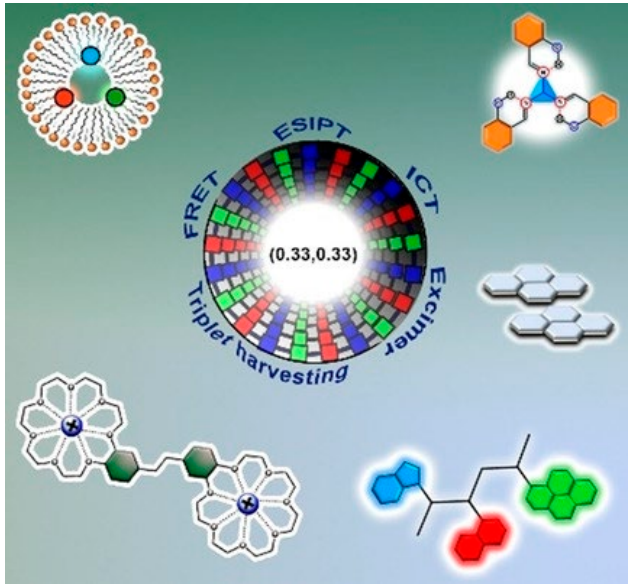
Fluorescent Materials



ACS Appl. Bio Mater. 2022, 5, 3623 (review)

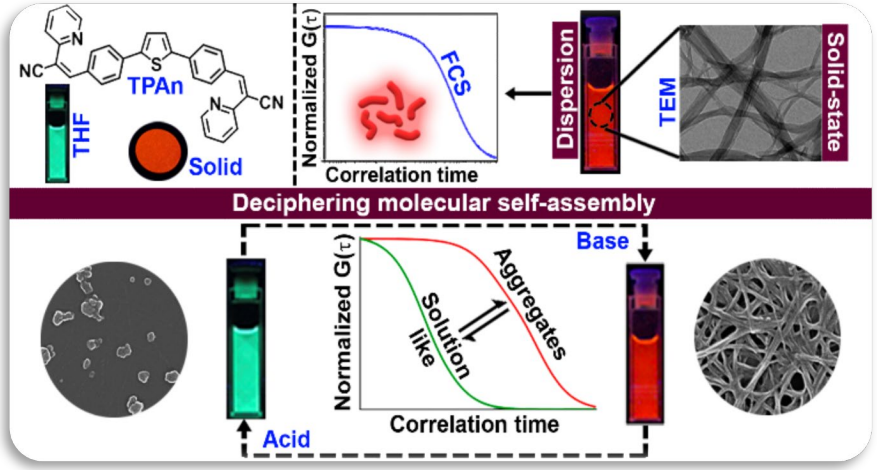


J. Mater. Chem. C, 2022, 10, 6141-6195 (review)

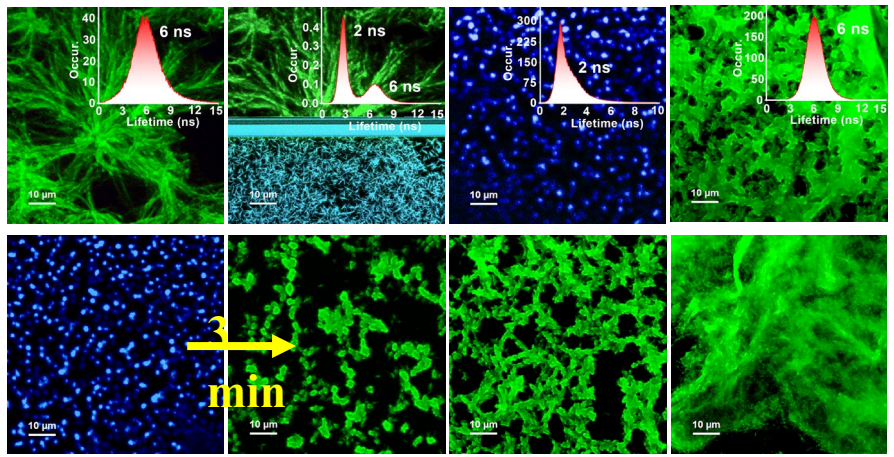


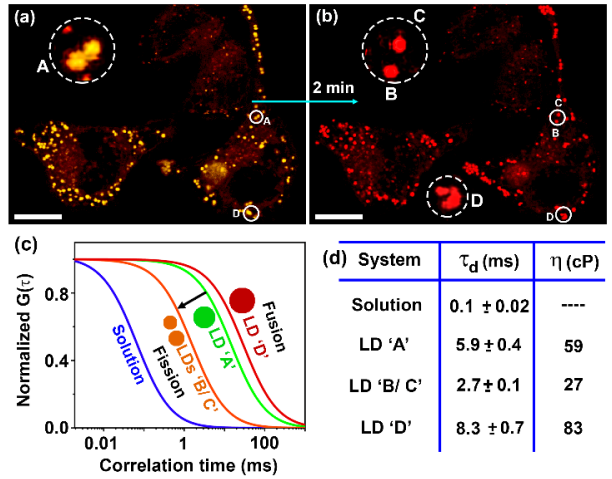
Chem. Eur. J. 2020, 26, 5557-5582 (Review)

Dynamics of self-assembly and tracking of organelle dynamics



Chem. Sci. 2021, 12, 5874-5882



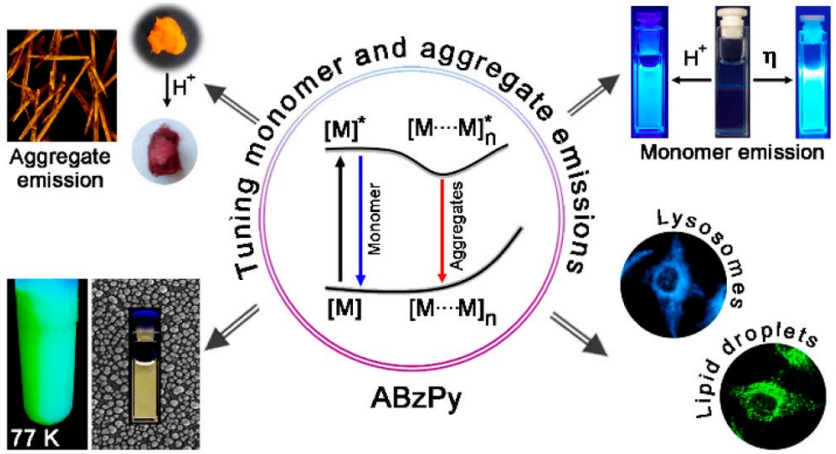


(d) System	τ_d (ms)	η (cP)
Solution	0.1 ± 0.02	----
LD 'A'	5.9 ± 0.4	59
LD 'B/ C'	2.7 ± 0.1	27
LD 'D'	8.3 ± 0.7	83

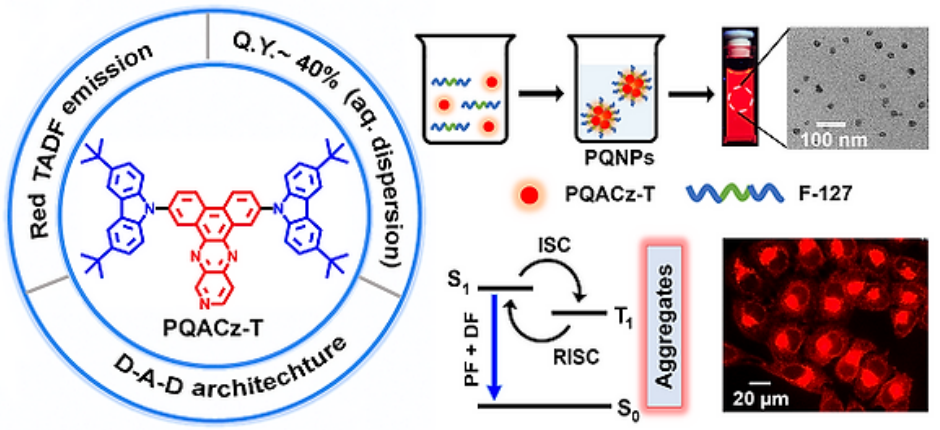
ACS Materials Lett. 2023, 5, 27-35

Organic, Inorganic, and Hybrid Nanomaterials

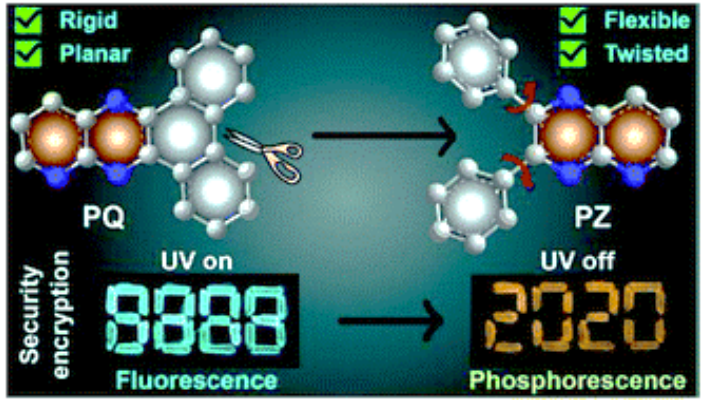
Organic Nanomaterials



J. Phys. Chem. B 2022, 126, 3, 691-701

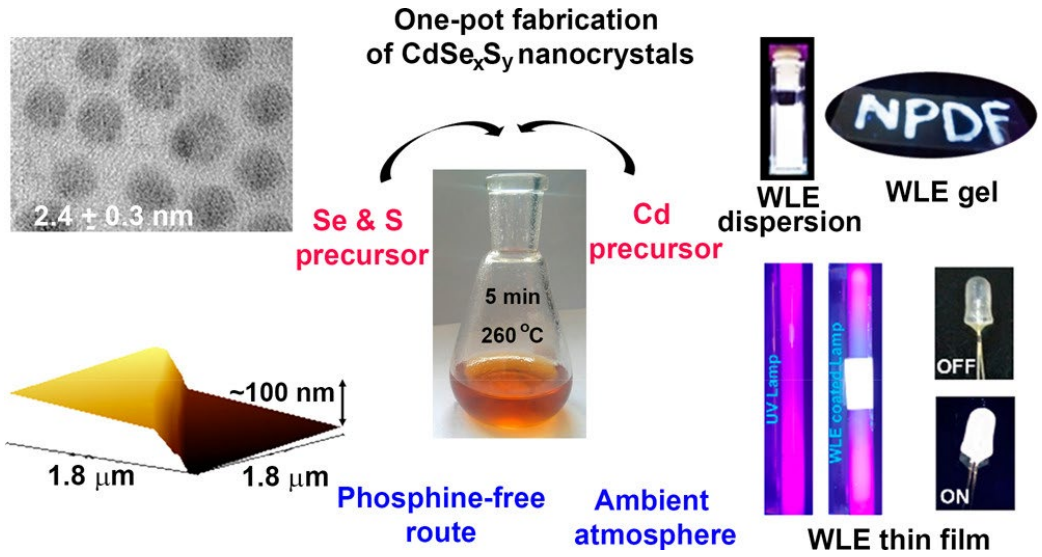


Organic Materials, 2021, 3, 477-487 (Invited article)

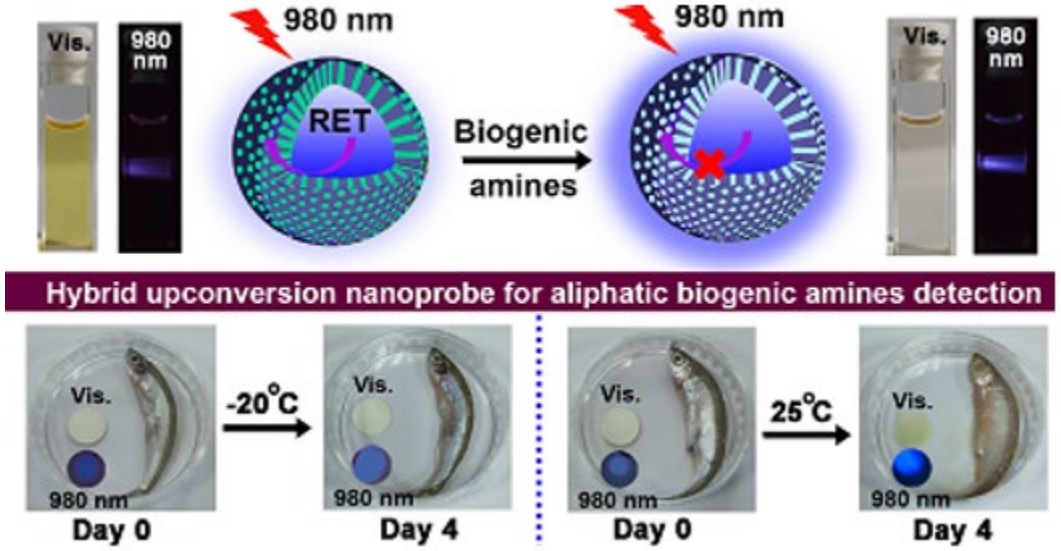


J. Mater. Chem. C, 2020,8, 12943-12950

Inorganic and Hybrid Nanomaterials



ACS Sustainable Chem. Eng. 2021, 9, 16, 5613-5622



Nanoscale Adv., 2021, 3, 3232-3239

Acknowledgment

IISER Bhopal

Funding agencies

CIF

Thank You