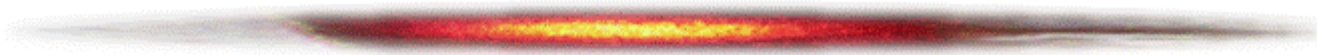


Gap-Plasmons:

Harnessing Light and Heat at Nanoscale

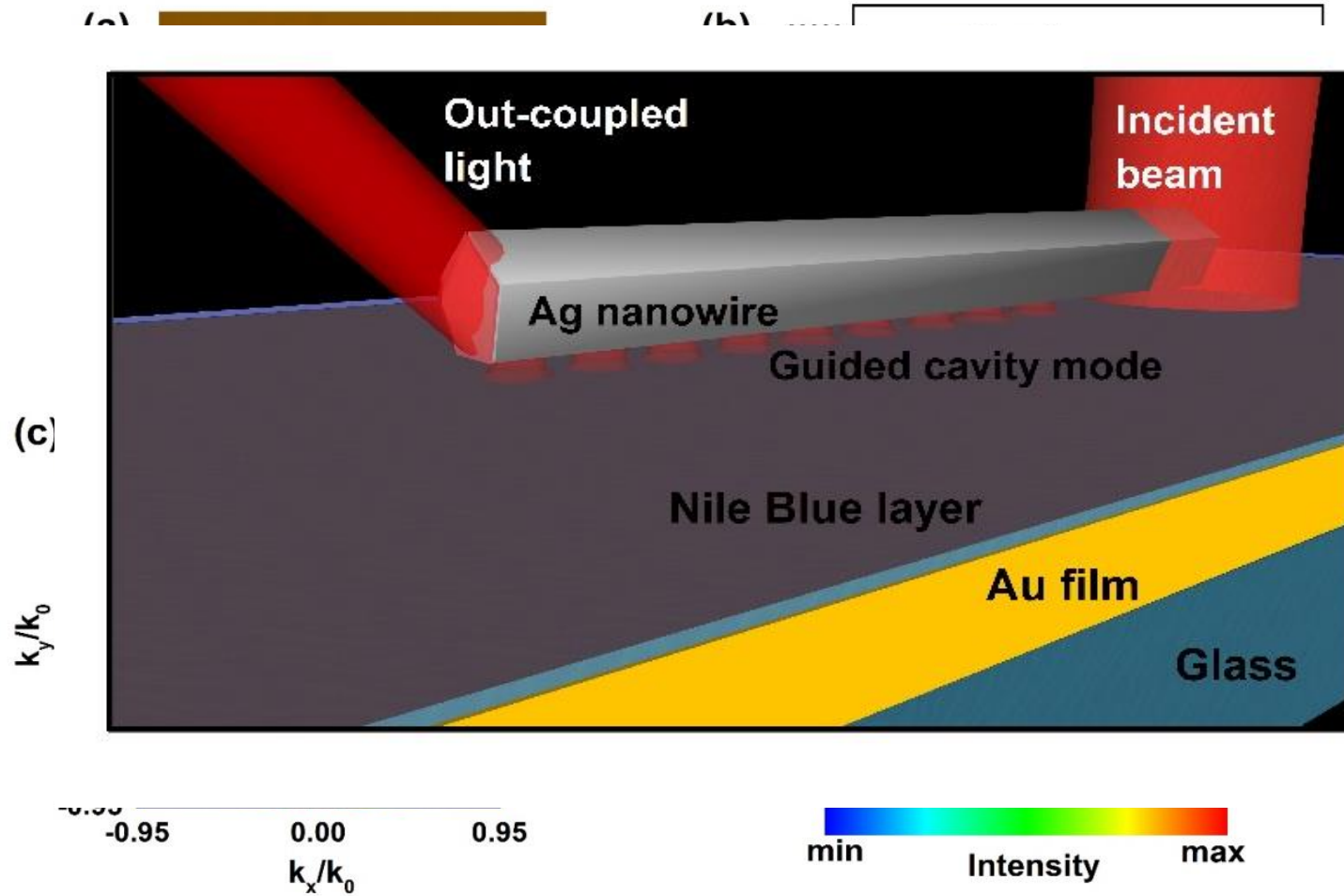


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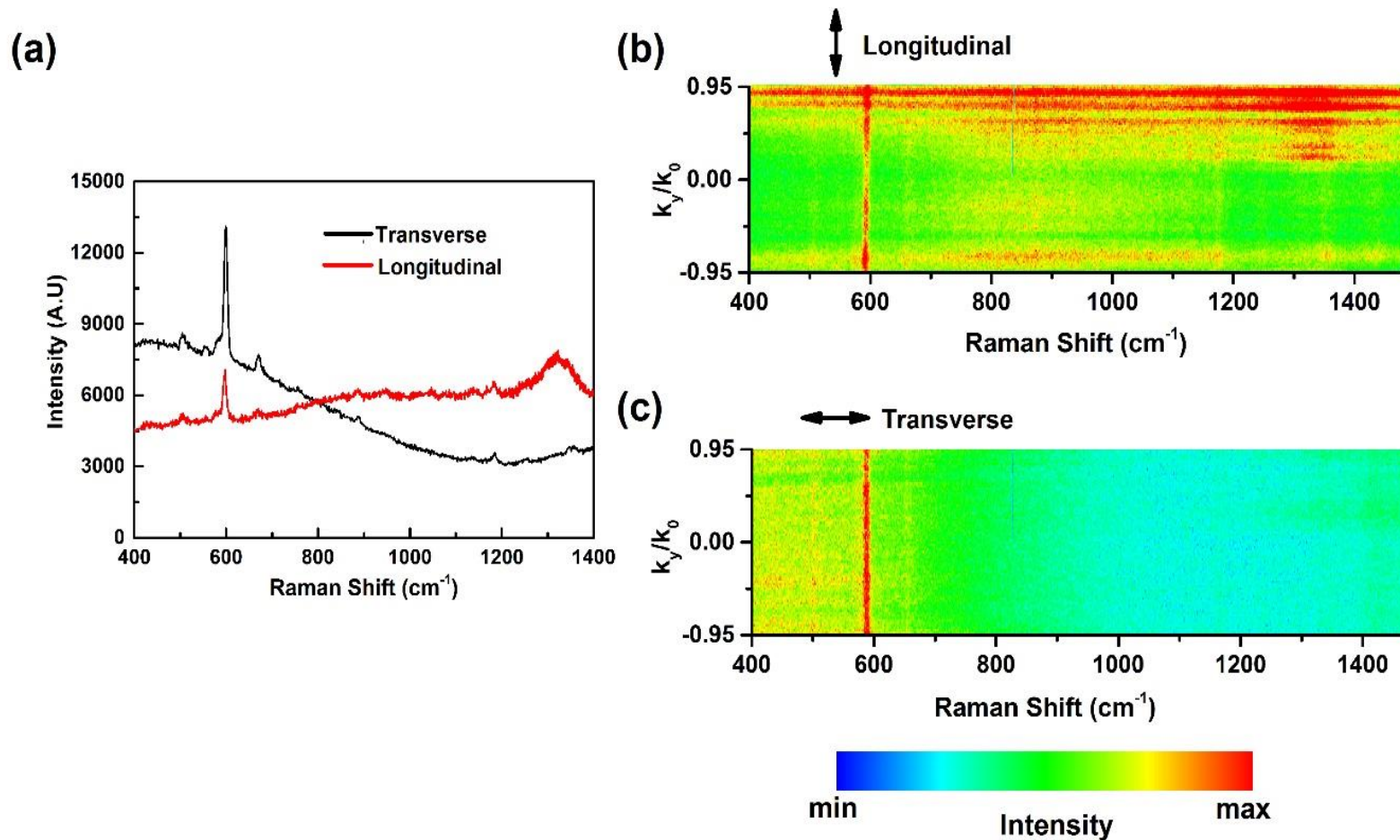
Effect
on
light emission from molecules

Extended Gap-Plasmon Nano-cavity

Energy-Momentum Spectroscopy of SERRS + fluorescence



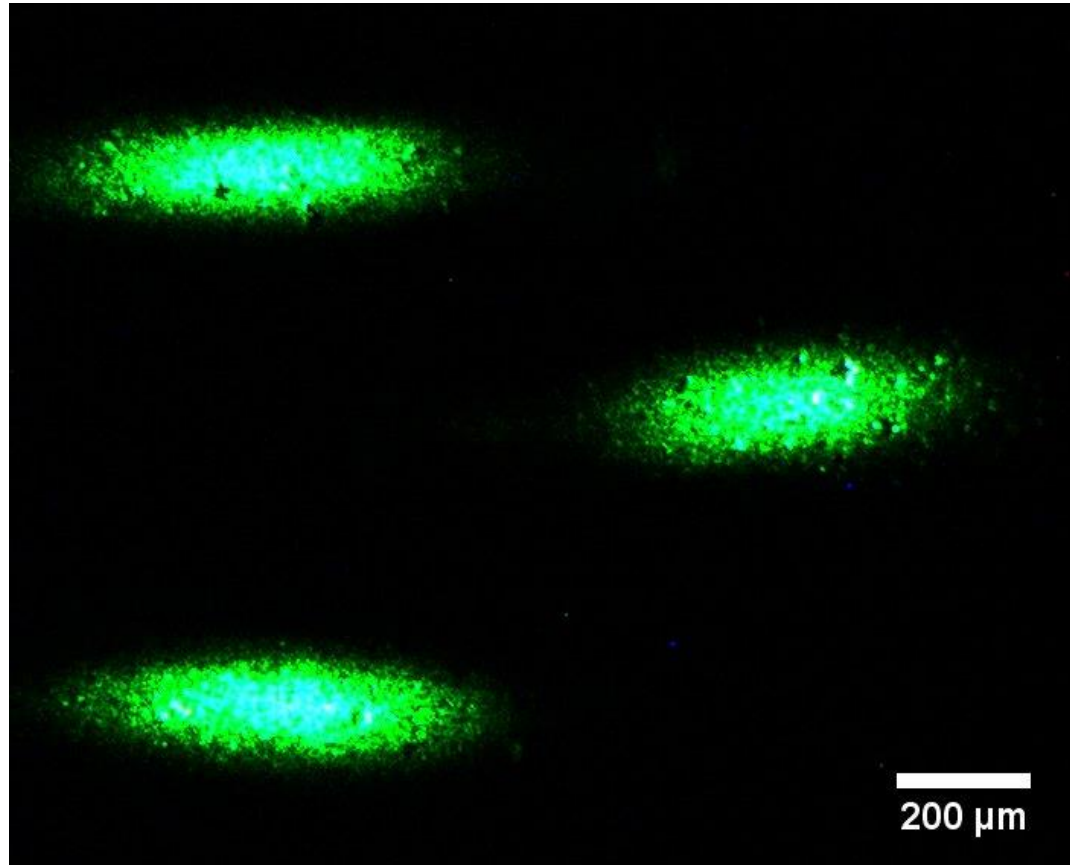
Emission direction is governed by out-coupled mode



Effect
on
heat dissipation

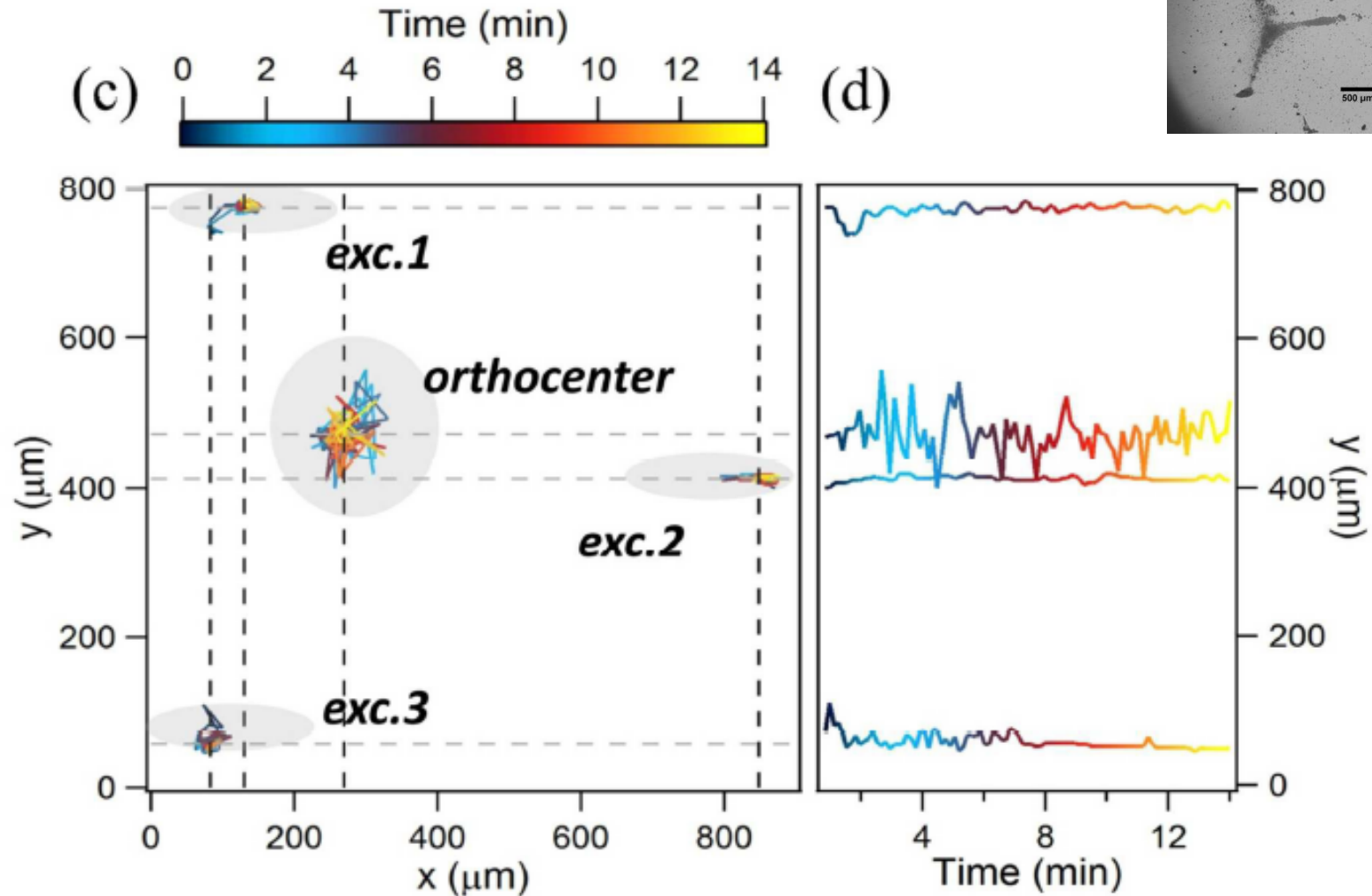
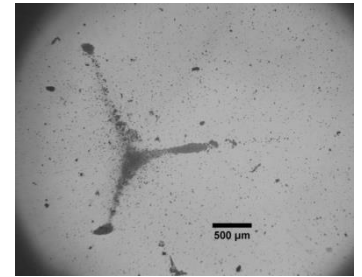
Dynamic assembly of nanoparticles at metal-fluid interface

Gold film + Ag NP + 532nm



P. Patra et al., Faraday Discussion, **186**, 95-106 (2016)

Dynamic equilibrium in remotely assembled nanoparticles - Particle cluster-tracking measurements



Conclusion:

Gap plasmons create

a wealth of new opportunities to

study light and heat at nanoscale

Acknowledgements

THANK YOU

Current group:

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Preeti Gupta,
Vijay Kumar

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Adarsh B. Vasista,
Deepak Kumar Sharma,
Vandana Sharma
Shailendra Chaubey
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Sruthi Polali (Rice University)
Mohit Raghuwanshi (Univ. Rouen)
Shreyash Tandon (IIT B)
Rajath Sawant (CNRS, France)
Harshvardhan Jog (U Penn)