

A comparison of work styles: Japan vs. USA

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Outline

- Research at U-Tokyo
 - Modeling optical properties of metal nanoparticles
- Work style: Japan vs. USA
 - Controversial quotes
 - Japan vs. US style
 - Potential conflicts in research style
 - American in Japan
 - Japanese in USA

Research Summary

Nano-NEW

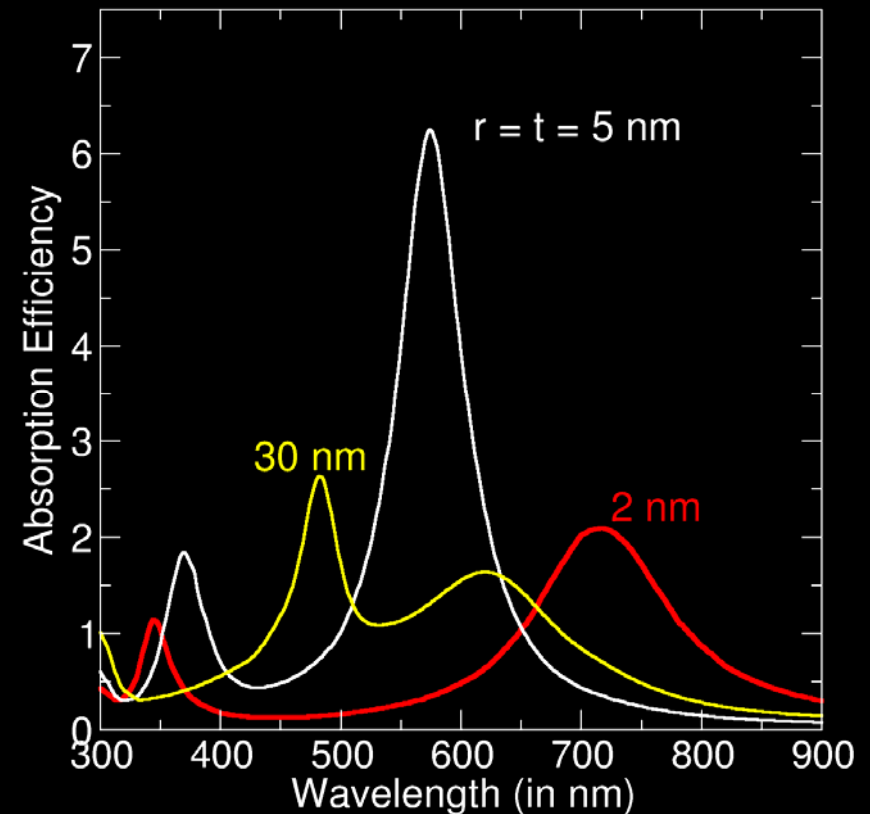
+



Gustav Mie

OLD
math
(1908!)

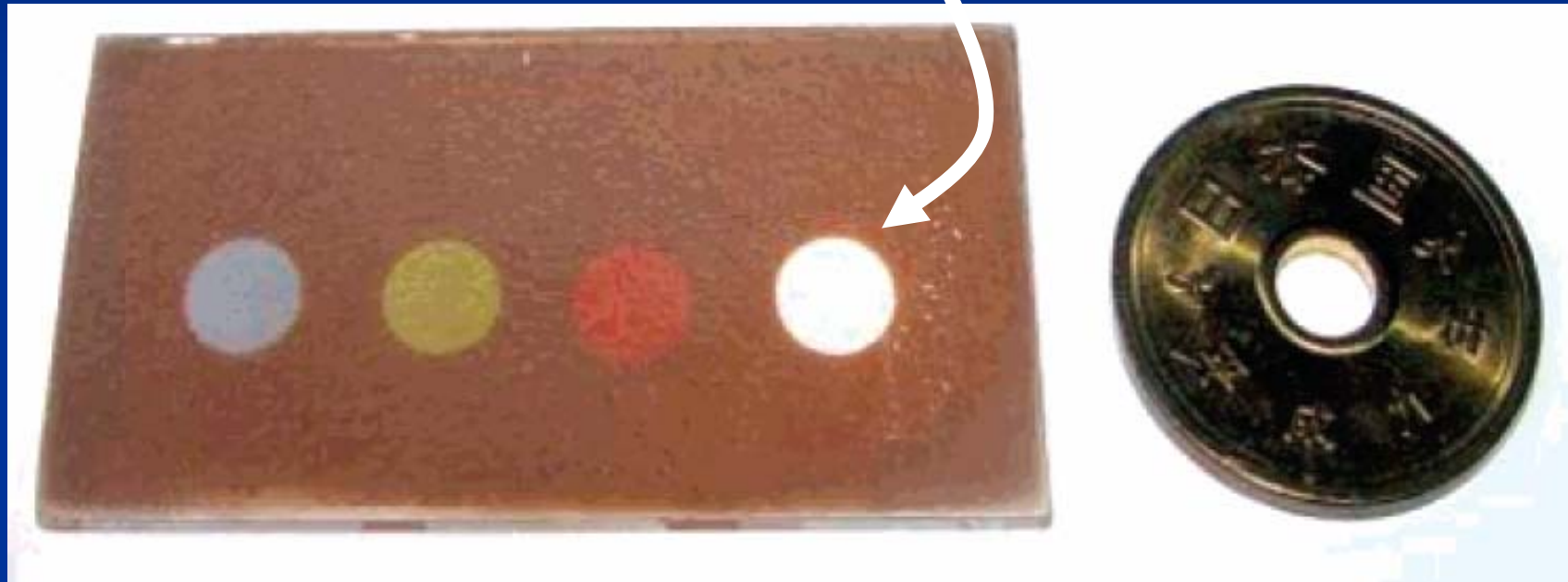
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Model of optical spectrum

TiO₂ films in Tatsuma lab

usually white!

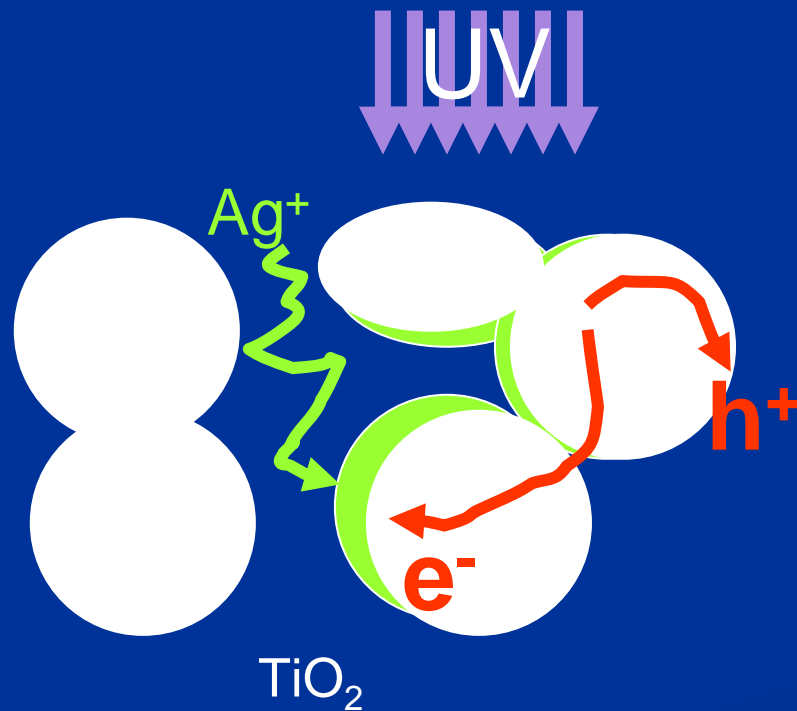
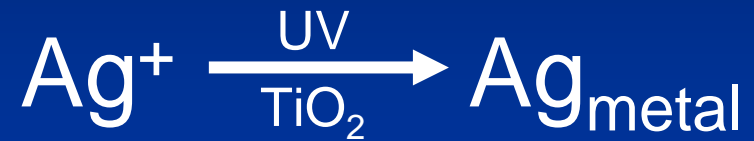


Naoi, Ohko, & Tatsuma, "TiO₂ films loaded with Ag Nanoparticles: control of multicolor photochromic behavior."

JACS 2004

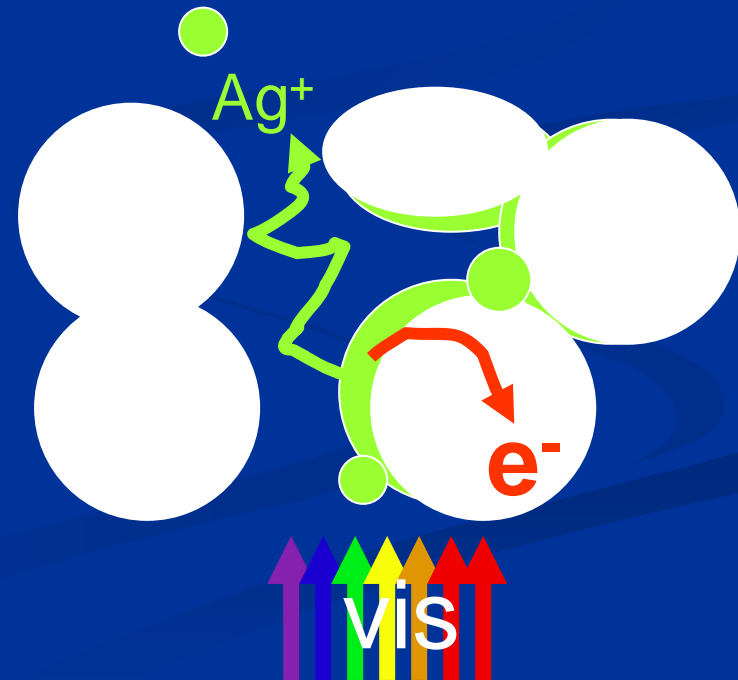
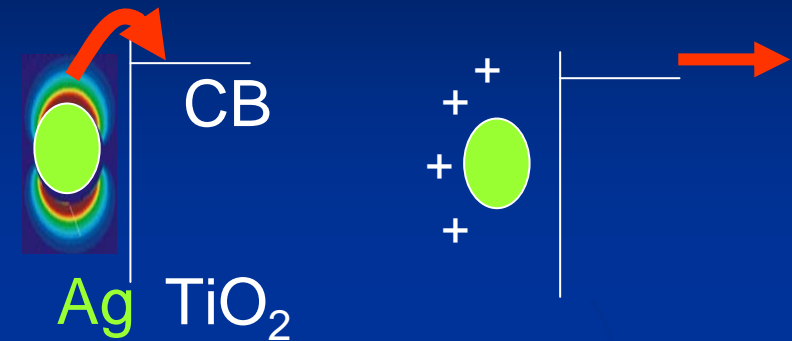
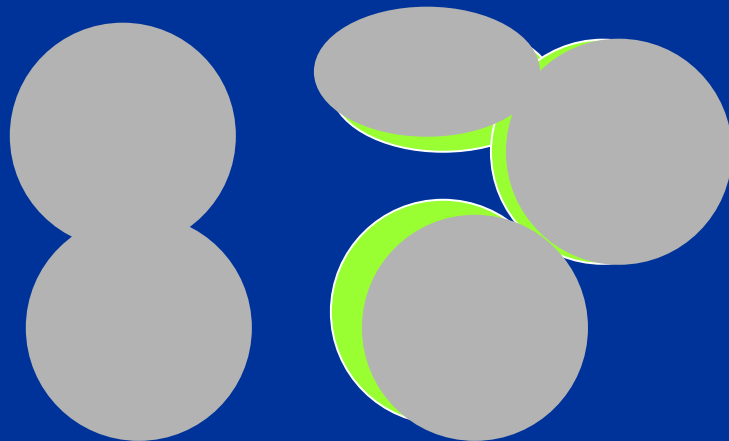
Color change in TiO₂ & Ag film

1. Make film brown



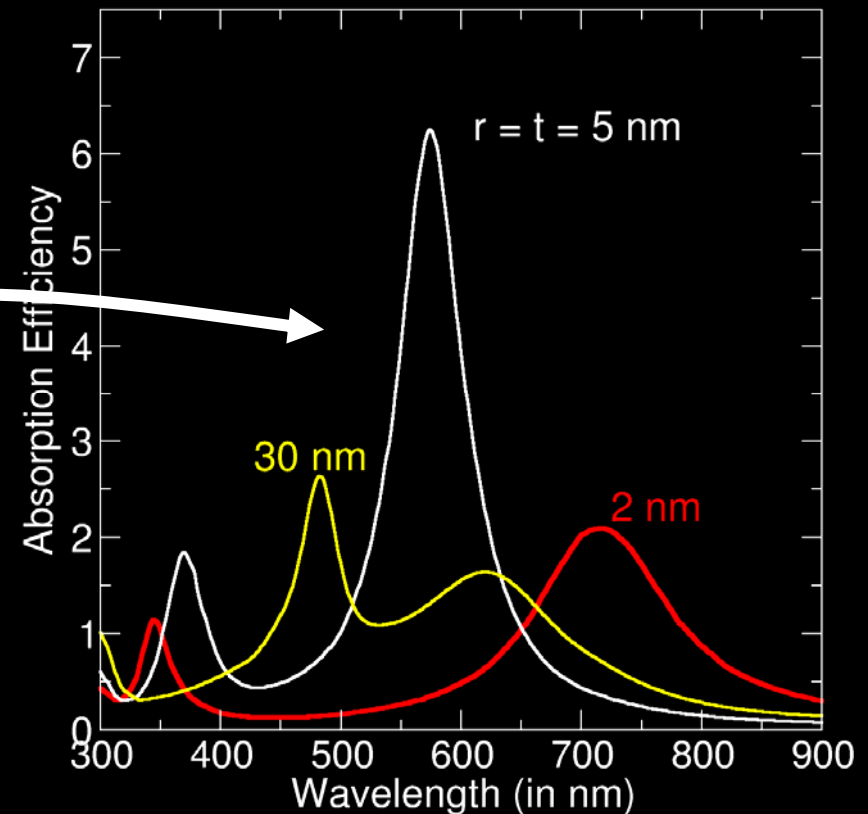
Color change in TiO₂ & Ag film

2. Color Training

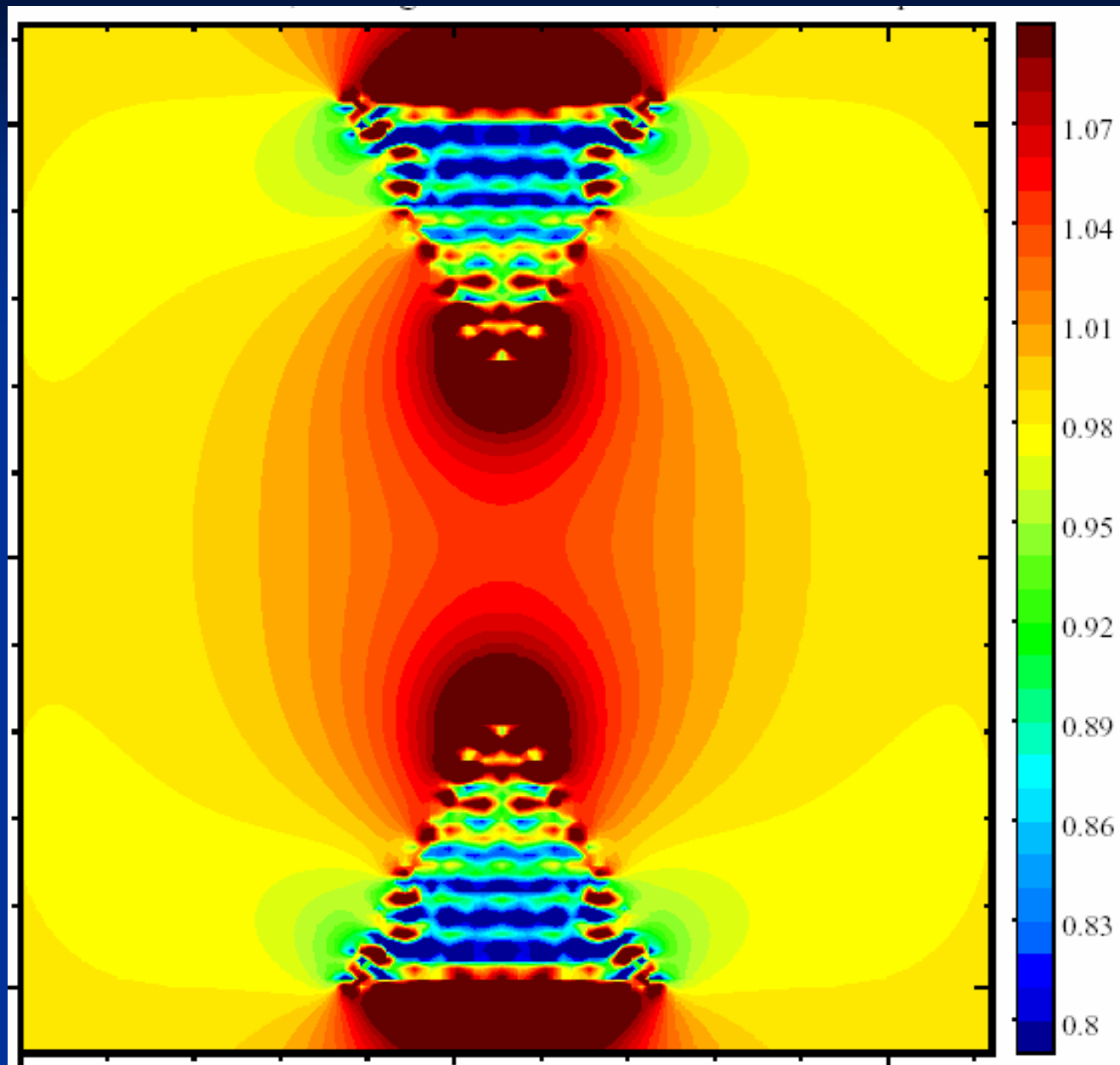


Shape & size dependence

- Computer models aid understanding of measured optical spectra
- These core-shell Ag particles *probably* exist in the TiO_2 film



Future research



Nano-
particle
optical
coupling



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この場所に挿入されていた図を省略させて
いただきます

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いただきます

Everyone's different!

Japan vs. US research style*

	Japan	US*
Formality	<ul style="list-style-type: none">■ Neat dress = respect, "rank"	<ul style="list-style-type: none">■ Not so important
Meetings & seminar	<ul style="list-style-type: none">■ Read! Read!■ Present results & discuss after careful preparation	<ul style="list-style-type: none">■ Talk! Talk!■ Present results at almost any time, & "brainstorming"

Japan vs. US research style*

	Japan	US
Meetings & seminar	■ ... ? (Conferences only?)	■ ~Weekly visiting speaker
Respect	■ Effort	■ Efficiency
Collaboration	■ “Keep it in the family”	■ Spread the wealth

A US researcher in Japan...

- ... can easily feel **isolated**.
 - *Chance to discuss research ideas?*
 - *Lab members don't brainstorm "beta" or "alpha" ideas?*
 - *Am I really so scary?*
- ... can easily feel **frustrated**.
 - *Why waste time writing (& reading) hand-outs?*
 - *... and why is my lab & restroom so dirty? ☺*

A Japanese researcher*^{Maybe} in the US...

- ... can easily feel **overwhelmed**.
 - *How can I understand the logic behind everything?*
 - *What if I make a mistake?*
- ... can easily feel **under-appreciated**.
 - *But English is my second language—don't you know it is difficult?*
 - *I spent 6 hours on this figure! Don't tell me so directly that it is all wrong!!*

The Foreigner Rollercoaster

