

BIOGRAPHY

Chair Professor, National Yang Ming Chiao Tung University

Professor Emeritus, Osaka University

Foreign Fellow, National Academy of Sciences, India (2010-present)

Doctor Honoris Causa de Ecole Normale Supérieure de Cachan, France (2006-2013)

Foreign Member, Royal Flemish Academy of Belgium for Science and the Arts (1998-present)

Dr. Hiroshi Masuhara graduated from Tohoku University (1966) in Sendai and obtained Ph.D. degree from Osaka University (1971). He is a physical chemist working in multidisciplinary areas in departments of chemistry (Tohoku University), synthetic chemistry (Osaka University), polymer science and engineering (Kyoto Institute of Technology), applied physics (Osaka University), frontier bioscience (Osaka University), life science (Hamano Foundation), and materials science (Nara Institute of Science and Technology). In 2008 he joined Department of Applied Chemistry of National Yang Ming Chiao Tung University as Chair Professor. In Laser Bio/Nano Science Laboratory he extended seminal researches on (1) laser trapping dynamics of nanoparticles, (2) laser trapping crystallization of molecules and proteins, and (3) application of femtosecond laser for fabricating individual cell-based devices.

Links

Masuhara Lab in NYCU

<https://masuhara.nctu.edu.tw/>

Hiroshi Masuhara website

<http://www.masuhara.jp/>

Publications

About 600 papers in English, 120 Japanese mini-reviews, and 20 writing and editing books.

Research Articles (2016-2021)

Optically Evolved Assembling of Polystyrene Particle at Solution Interface

J. Chin. Chem. Soc., Accepted (2021)

J. Phys. Chem. C, 124, 27107-27117 (2020)

J. Phys. Chem. Lett., 11, 6057-6062 (2020)



Langmuir, 36, 14234-14242 (2020)

J. Phys. Chem. C, 120, 15578-15585 (2016)

Langmuir, 32, 12488-12496 (2016)

Nano Lett., 16, 3058-3062 (2016)

Optically Evolved Swarming of Au Nanoparticle at Solution Interface

J. Phys. Chem. C, Accepted (2021)

J. Phys. Chem. C, 124, 16604-16615 (2020)

Opt. Express, 28, 27727-27735 (2020)

Nano Lett., 18, 5846-5853 (2018)

J. Photochem. Photobiol. A: Chem., 346, 177-186 (2017)

Optically Evolved Assembling of Molecules and proteins

J. Phys. Chem. C, Accepted (2021)

J. Mater. Chem. C, 9, 7545-7554 (2021)

Angew. Chem. Int. Ed., 59, 7063-7068 (2020)

Appl. Phys. Express, 12, 112008 (2019)

Appl. Phys. Express, 11, 85502 (2018)

Cryst. Growth Des., 18, 7079-7087 (2018)

Phys. Chem. Chem. Phys., 20, 6034-6039 (2018)

Angew. Chem. Int. Ed., 56, 6739-6743 (2017)

Langmuir, 33, 755-763 (2017)

Langmuir, 33, 8311-8318 (2017)

Cryst. Growth Des., 16, 1953-960 (2016)

J. Mater. Chem. C, 4, 5231-5240 (2016)

Femtosecond Trapping and Optical Resonance Effect

ACS Photonics, 8, 1832-1839 (2021)

Opt. Express, 28, 28656-28671 (2020)

J. Phys. Chem. C, 123, 27823-27833 (2019)

J. Phys. Chem. C, 122, 13233-13242 (2018)

Opt. Express, 25, 655-4664 (2017)

RSC Adv., 7, 42606-42613 (2017)

J. Phys. Chem. C, 120, 392-2399 (2016)

J. Phys. Chem. C, 120, 251-5256 (2016)

Review, Accounts, and Feature Articles

Annu. Rev. Phys. Chem., 72, 565-589 (2021)
Chem. Rec., 21, 1473-1488 (2021)
Chem. Rec., 21, 1261-1269 (2021)
J. Photochem. Photobiol. C, 28, 1-28 (2016)
Opt. Rev., 22, 143-148 (2015)
Chem. Soc. Rev., 43, 2147-2158 (2014)
Bull. Chem. Soc. Jpn., 86, 755-783 (2013)
Acc. Chem. Res., 45, 1946-1954 (2012)
Pure Appl. Chem., 83, 869-883 (2011)
Chem. Asian J., 6, 2878-2889 (2011)
Acc. Chem. Res., 41, 1790-1798 (2008)
Pure Appl. Chem., 78, 2205-2226 (2006)
J. Phys. Chem. B, 106, 3049-3060 (2002)
J. Photochem. Photobiol. C, 1, 57-78 (2000)
Pure and Appl. Chem., 64, 1279-1284 (1992)
Accounts Chem. Res., 14, 312-318 (1981)

Awards

2017 The Order of the Sacred Treasure, Gold Rays with Neck Ribbon (瑞宝中綬章)
2010 Asian Photochemistry Association Award
2010 Mukai Prize (Tokyo Ohka Foundation)
2008 Medal with Purple Ribbon (紫綬褒章)
2006 The Spectroscopic Society of Japan Award
2006 Porter Medal (European, American & Asian Photochemistry Associations)
2006 The Chemical Society of Japan Award
2005 Kenjiro Sakurai Memorial Prize (Optoelectronic Industry and Technology Development Association, Japan)
1994 Osaka Science Prize
1994 Divisional Award of Chemical Society of Japan
1993 Moet Hennessy Louis Vuitton International Prize “Science for Art” Da Vinci of Excellence (France)
1989 Japanese Photochemical Association