

*Journals***2022**

1. “Elevated Myl9 and thrombospondin-1-expressing monocytes correlate with SARS-CoV-2-associated immunothrombosis and COVID-19 severity”
C. Iwamura, K. Hirahara,* M. Kiuchi, S. Ikehara, K. Azuma, T. Shimada, S. Kuriyama, S. Ohki, E. Yamamoto, Y. Inaba, Y. Shiko, A. Aoki, K. Kokubo, R. Hirasawa, T. Hishiya, K. Tsuji, T. Nagaoka, S. Ishikawa, A. Kojima, H. Mito, R. Hase, Y. Kasahara, N. Kuriyama, T. Tsukamoto, S. Nakayama, T. Urushibara, S. Kaneda, S. Sakao, M. Tobiume, Y. Suzuki, M. Tsujiwaki, T. Kubo, T. Hasegawa, H. Nakase, O. Nishida, K. Takahashi, K. Baba, Y. Iizumi, **T. Okazaki**, M. Y. Kimura, I. Yoshino, H. Igari, H. Nakajima, T. Suzuki, H. Hanaoka, T. Nakada, Y. Ikehara, K. Yokote and T. Nakayama*
Proc. Nat. Acad. Sci., 119(33), e2203437119 (2022).
2. “Liquid crystalline behaviors of single-walled carbon nanotubes in aqueous sodium cholate dispersion”
K. Kojima, M. Aizawa, T. Yamamoto, S. Muroga, K. Kobashi and **T. Okazaki***
Langmuir, 38, 8899-8905 (2022).
3. “Porosity and Size Analysis of Porous Microparticles by Centrifugal Sedimentation with and without Density Gradient”
Y. Kato,* T. Morimoto, K. Kobashi, T. Yamaguchi, T. Mori, T. Sugino and **T. Okazaki***
Powder Technol., 407, 117663 (2022).
4. “Single-walled Carbon Nanotube Membranes Accelerate Active Osteogenesis in Bone Defects: Potential of Guided Bone Regeneration Membranes”
Y. Xu, E. Hirata,* Y. Iizumi, N. Ushijima, K. Kubota, S. Kimura, Y. Maeda, **T. Okazaki** and A. Yokoyama
ACS Biomater. Sci. Eng., 8, 1667-1675 (2022).
5. “Patterning of graphene using wet etching with hypochlorite and UV light”
M. Zhang*, M. Yang, Y. Okigawa, T. Yamada*, H. Nakajima, Y. Iizumi and **T. Okazaki***
Sci. Rep., 12, 1541 (2022).
6. “Annealing-induced enhancement of electrical conductivity and electromagnetic interference shielding in injection-molded CNT polymer composites”
T. B. N. Thi, S. Ata,* T. Morimoto, Y. Kato, M. Horibe, T. Yamada, **T. Okazaki** and K. Hata
Polymer, 245, 124680 (2022).

7. "Comprehensive characterization of structural, electrical, and mechanical properties of carbon nanotube yarns produced by various spinning methods"
T. Watanabe, S. Yamazaki, S. Yamashita, T. Inaba, S. Muroga, T. Morimoto, K. Kobashi and **T. Okazaki***
Nanomaterials, 12, 593 (2022). (Selected as Editor's choice)
8. "Streptavidin-conjugated oxygen-doped single-walled carbon nanotubes as near-infrared labels for immunoassays"
K. Kojima, Y. Iizumi, M. Zhang and **T. Okazaki***
Langmuir, 38(4), 1509-1513 (2022).
9. "Transport property characterization of sparse CNT networks via AFM images"
T. Inaba, T. Morimoto* and **T. Okazaki**
Surf. Interface Anal., 2022;1-9.doi:10.1002/sia.7056.

2021

10. "Virtual Experimentations by Deep learning on Tangible Materials"
T. Honda, S. Muroga, H. Nakajima, T. Shimizu, K. Kobashi, H. Morita, **T. Okazaki** and Kenji Hata*
Commun. Mater., 2, 88 (2021).
11. "Supercapacitor Electrodes of Blended Carbon Nanotubes with Diverse Conductive Porous Structures Enabling High Charge/Discharge Rates"
T. Shimizu, K. Kobashi,* H. Nakajima, S. Muroga, T. Yamada, **T. Okazaki**, K. Hata
ACS App. Energy Mater., 4(9), 9712–9720 (2021).
12. "Carbon Nanotube Length-distribution Estimation by One Dimensional Plasmon Resonance for Solid-State Samples"
T. Morimoto,* K. Kobashi and **T. Okazaki**
J. Phys. Chem. C, 125, 19362-19367 (2021).
13. "Removal of Carbon Nanotubes from Aqueous Solutions by Sodium Hypochlorite: Effects of Treatment Conditions"
M. Yang, **T. Okazaki** and M. Zhang
Toxics, 9, 223 (2021).
14. "Novel Approaches to In-Situ ATR-FTIR Spectroscopy and Spectroscopic Imaging for Real-Time

Simultaneous Monitoring Curing Reaction and Diffusion of the Curing Agent at Rubber Nanocomposite Surface"

S. Muroga *, Y. Takahashi, Y. Hikima *, S. Ata, S. G. Kazarian *, M. Ohshima, **T. Okazaki**, Kenji Hata
Polymers, 13, 2879 (2021).

15. "N₂ Gas Adsorption Sites of Single-Walled Carbon Nanotube Bundles: Identifying Interstitial Channels at Very Low Relative Pressure"

K. Kobashi,* Y. Iizumi, S. Muroga, T. Morimoto and **T. Okazaki**
Langmuir, 37(30), 9144–9150 (2021).

16. "Possible dimensionality transition behavior in localized plasmon resonances of confinement-controlled graphene devices"

T. Morimoto,* Y. Ikuta and **T. Okazaki**
J. Phys. Commun., 5, 075002 (2021).

17. "Electron Scattering by Friedel Oscillations in Carbon Nanotubes"

T. Inaba, T. Morimoto,* S. Yamazaki and **T. Okazaki**
Nano Research (2021). <https://doi.org/10.1007/s12274-021-3571-0>

18. "Quantitative Surface Characterization of As-Grown and Acid-Treated Single-Walled Carbon Nanotubes: Implications for Functional Materials"

K. Kobashi,* Y. Iizumi, K. Hirota, N. Shinomori, K. Shimamoto, Y. Koga, T. Morimoto and **T. Okazaki**
ACS Appl. Nano Mater., 4(5), 5273-5284 (2021).

19. "Comparative assessments of the biodistribution and toxicity of oxidized single-walled carbon nanotubes dispersed with two different reagents after intravenous injection into mice"

M. Zhang,* Y. Xu, M. Yang, M. Yudasaka, **T. Okazaki**
Nanotoxicology, 15(6), 798-811 (2021).

20. "Tailoring the electrically conductive network in injection-molded polymer-carbon nanotube composite at low filler content"

T. B. N. Thi, S. Ata,* T. Morimoto, T. Yamada, **T. Okazaki** and K. Hata
Mater. Today, 40, 5-8 (2021).

21. "New evaluation method for the curing degree of rubber and its nanocomposites using ATR-FTIR spectroscopy"

S. Muroga,* Y. Takahashi, Y. Hikima, S. Ata, M. Ohshima, **T. Okazaki** and K. Hata
Polymer Testing, 93, 106993 (2021).

2020

22. “Improved thermal stability of silicone rubber nanocomposites with low filler content, achieved by well-dispersed carbon nanotubes”

T. Shimizu, R. Kishi,* K. Kobashi, T. Morimoto, **T. Okazaki**, T. Yamada, K. Hata
Composites Commun., 22, 100482 (2020).

23. “Outer Surface Covalent Functionalization of Carbon Nanohorn Spherical Aggregates Assessed by Highly Spatial-Resolved Energy Dispersive X-ray Spectrometry in Scanning Electron Microscopy”

H. Nakajima, T. Morimoto, K. Kobashi, M. Zhang, I. K. Sideri, N. Tagmatarchis and **T. Okazaki***
J. Phys. Chem. C, 124, 25142-25147 (2020).

24. “The clearance of single-wall carbon nanotubes from mouse lung: A quantitative evaluation”

M. Zhang,* Y. Xu, M. Yang, M. Yudasaka and **T. Okazaki**
Nanoscale Adv., (2020).

25. “Confinement of Hydrogen Molecules at Graphene–Metal Interface by Electrochemical Hydrogen Evolution Reaction”

S. Yasuda,* K. Tamura, T. Terasawa, M. Yano, H. Nakajima, T. Morimoto, **T. Okazaki**, R. Agari, Y. Takahashi, M. Kato, I. Yagi and H. Asaoka
J. Phys. Chem. C, (2020).

26. “High Quality Preserved Carbon Nanotube Dispersions with Reduced Their Aggregate Size Distribution by Viscous Liquid”

K. Kobashi,* A. Sekiguchi, T. Yamada, S. Muroga and **T. Okazaki**
ACS Appl. Nano Mater., 3(2), 1391-1399 (2020).

27. “Vertically aligned growth of small-diameter single-walled carbon nanotubes by alcohol catalytic chemical vapor deposition with Ir catalyst”

T. Okada, K. P. Sharma, T. Suzuki, T. Saida, S. Naritsuka, Y. Iizumi, **T. Okazaki**, S. Iijima and T. Maruyama*
Appl. Surf. Sci., 509, 145340 (2020).

2019

28. "Nonuniform Functional Group Distribution of Carbon Nanotubes Studied by Energy Dispersive X-ray Spectrometry Imaging in SEM"
H. Nakajima, T. Morimoto*, Y. Zhou, K. Kobashi, S. Ata, T. Yamada and **T. Okazaki***
Nanoscale, 11, 21487-21492 (2019).
29. "Wafer-Scale and Deterministic Patterned Growth of Monolayer MoS₂ via Vapor-Liquid-Solid Method"
S. Li,* Y.-C. Lin, X.-Y. Liu, Z. Hu, J. Wu, H. Nakajima, S. Liu, **T. Okazaki**, W. Chen, T. Minari, Y. Sakuma, K. Tsukagoshi, K. Suenaga, T. Taniguchi* and M. Osada
Nanoscale, 11, 16122 (2019).
30. "Nondestructive real-space imaging of current density distributions in randomly networked conductive nanomaterials"
T. Morimoto,* S. Ata, T. Yamada, **T. Okazaki***
Sci. Rep., 9, 14572 (2019).
arXiv:1811.10910 [cond-mat.mtrl-sci] (27 November 2018).
31. "Quantitative method for analyzing dendritic carbon nanotube agglomerates in dispersions using differential centrifugal sedimentation"
Y. Kato, T. Morimoto, K. Kobashi, T. Yamada, **T. Okazaki*** and K. Hata
J. Phys. Chem. C, 123, 21252–21256 (2019).
32. "Synthesis of endohedral-fullerenes using laser ablation plasma from solid material and vaporized fullerenes"
H. Itagaki,* Y. Fujiwara, Y. Minowa, Y. Ikehara, T. Kaneko, **T. Okazaki**, Y. Iizumi, J. Kim and H. Sakakita
AIP Adv., 9, 075324 (2019).
33. "Classification of Commercialized Carbon Nanotubes into Three General Categories as a Guide for Applications"
K. Kobashi,* S. Ata, T. Yamada, D. N. Futaba, **T. Okazaki** and K. Hata
ACS Appl. Nano Mater., 2, 4043–4047 (2019).
34. "Synthesis of sub-millimeter single-crystal grains of aligned hexagonal boron nitride on epitaxial Ni film"
A. B. Taslim, H. Nakajima, Y.-C. Lin, Y. Uchida, K. Kawahara, **T. Okazaki**, K. Suenaga and H. Ago*
Nanoscale, 11, 14668-14675 (2019).
35. "Visualizing Electrical Network in Microinjection-molded CNT Polycarbonate Composite"
T. B. N. Thi, S. Ata,* T. Morimoto,* **T. Okazaki**, T. Yamada, K. Hata

Carbon,153, 136-147 (2019).

36. "Diameter-Dependent Degradation of 11 Types of Carbon Nanotubes: Safety Implications"
M. Zhang,* M. Yang, H. Nakajima, M. Yudasaka, S. Iijima and **T. Okazaki**
ACS Appl. Nano Mater., 2(7), 4293-4301 (2019).
37. "Nanotube Length and Density Dependences of Electrical and Mechanical Properties of Carbon Nanotube Fibres Made by Wet Spinning"
N. Tajima, T. Watanabe, T. Morimoto, K. Kobashi, K. Mukai, K. Asaka and **T. Okazaki***
Carbon, 152, 1-6 (2019).
38. "Characterization and biodistribution analysis of oxygen-doped single-walled carbon nanotubes used as in vivo fluorescence imaging probes"
T. Takeuchi, Y. Iizumi, M. Yudasaka, S. K. Kondoh and **T. Okazaki***
Bioconjugate Chem., 30, 1323–1330 (2019). (Cover Article)
39. "Time-Dependent Degradation of Carbon Nanotubes Correlates with Decreased Reactive Oxygen Species Generation In Macrophages"
M. Yang, M. Zhang,* H. Nakajima, M. Yudasaka, S. Iijima and **T. Okazaki**
Int. J. Nanomedicine, 14, 2797-2807 (2019).
40. "A Simple Method for Removal of Carbon Nanomaterials from Wastewater Using Hypochlorite"
M. Zhang*, Y. Deng, M. Yang, H. Nakajima, M. Yudasaka, S. Iijima and **T. Okazaki**
Sci. Rep. 9, 1284 (2019).
41. "Delayed Increase in Near-Infrared Fluorescence in Cultured Murine Cancer Cells Labelled with Oxygen-Doped Single-Walled Carbon Nanotubes"
S. Sekiyama, M. Umezawa,* Y. Iizumi, T. Ube, **T. Okazaki**, M. Kamimura and K. Soga*
Langmuir, 35, 831–837 (2019).
42. "Imaging of local structures affecting electrical transport properties of large graphene sheets by lock-in thermography"
H. Nakajima, T. Morimoto,* Y. Okigawa, T. Yamada, Y. Ikuta, K. Kawahara, H. Ago and **T. Okazaki***
Science Advances, 5, eaau3407 (2019).
43. "Natural rubber reinforced with cellulose nanofibers based on fiber diameter distribution as estimated by

differential centrifugal sedimentation”

A. Kumagai*, N. Tajima, T. Morimoto, S. Iwamoto, A. Nagatani, **T. Okazaki*** and T. Endo
Int. J. Bio. Macromol., 121, 989-995 (2019).

2018

44. “Stable 1T Tungsten Disulfide Monolayer and Its Junctions: Growth and Atomic Structures”

Y.-C. Lin, C.-H. Yeh, H.-C. Lin, M.-D. Siao, Z. Liu, H. Nakajima, **T. Okazaki**, M.-Y. Chou, K. Suenaga and P.-W. Chiu*

ACS Nano, 12, 12080–12088 (2018).

45. “Precise Control of Localized Surface Plasmon Wavelengths Is Needed for Effective Enhancement of Triplet-Triplet Annihilation-Based Upconversion Emission”

S. Jin, K. Sugawa,* N. Takeshima, H. Tahara, S. Igari, S. Yoshinari, Y. Kurihara, S. Watanabe, M. Enoki, K. Sato, W. Inoue, K. Tokuda, T. Akiyama, R. Katoh, K. Takase, H. Ozawa, **T. Okazaki**, T. Watanabe and J. Otsuki

ACS Photonics, 5, 5025–5037 (2018).

46. “Molecular Arrangements of Corannulene and Sumanene in Single-Walled Carbon Nanotubes”

Y. Iizumi, Z. Liu, K. Suenaga, S. Okada, S. Higashibayashi, H. Sakurai and **T. Okazaki***

ChemNanoMat, 4, 557–561 (2018).

47. “Oxygen-doped carbon nanotubes for near-infrared fluorescent labels and imaging probes”

Y. Iizumi, M. Yudasaka, J. Kim, H. Sakakita, T. Takeuchi and **T. Okazaki***

Sci. Rep., 8, 6272 (2018).

48. “Size-Dependent Cell Uptake of Carbon Nanotubes by Macrophages: A Comparative and Quantitative Study”

M. Zhang,* M. Yang, T. Morimoto, N. Tajima, K. Ichiraku, K. Fujita, S. Iijima, M. Yudasaka and **T. Okazaki**

Carbon, 127, 93-101 (2018).

2017

49. “Carbon nanotubes as a fluorescent label for surface plasmon resonance-assisted fluoroimmunoassay”

H. Ashiba,* Y. Iizumi, **T. Okazaki**, X. Wang and M. Fujimaki

Sensors, 17, 2569 (2017).

50. “Selective Dispersion of Large-Diameter Semiconducting Carbon Nanotubes by Functionalized Conjugated

Dendritic Oligothiophenes for Use in Printed Thin Film Transistors”

W. Gao, W. Xu, J. Ye, T. Liu, J. Wang, H. Tan, Y. Li, M. Tange, D. Sun, L. Wu, **T. Okazaki**, Y. Yang, Z. Zhang, J. Zhao,* Z. Cui and C.-Q. Ma*

Adv. Func. Mater., 27, 1703938 (2017).

51. “Effect of surfactants and dispersion methods on properties of single-walled carbon nanotube fibers formed by wet-spinning”

X. Wu, K. Mukai*, K. Asaka, T. Morimoto and **T. Okazaki***

Appl. Phys. Exp., 10, 055101 (2017).

52. “e-beam irradiation effects on IR absorption bands in single-walled carbon nanotubes”

M. Ichida,* K. Nagao, Y. Ikemoto, **T. Okazaki**, Y. Miyata, A. Kawakami, H. Kataura, I. Umezumi, H. Ando

Solid State Communications, 250, 119–122 (2017).

2016

53. “Relationship between Mechanical and Electrical Properties of Continuous Polymer-Free Carbon Nanotube Fibers by Wet-Spinning Method and Nanotube-Length Estimated by Far-Infrared Spectroscopy”

X. Wu, T. Morimoto, K. Mukai, K. Asaka and **T. Okazaki***

J. Phys. Chem. C, 120, 20419–20427 (2016).

54. “Near-Infrared Photoluminescence Properties of Endohedral Mono- and Dithulium Metallofullerenes”

Z. Wang, N. Izumi, Y. Nakanishi, T. Koyama, T. Sugai, M. Tange, **T. Okazaki** and H. Shinohara*

ACS Nano, 10, 4282–4287 (2016).

55. “Wet spinning of continuous polymer-free carbon-nanotube fibers with high electrical conductivity and strength”

K. Mukai*, K. Asaka, X. Wu, T. Morimoto, **T. Okazaki**, T. Saito and M. Yumura

Appl. Phys. Exp., 9, 055101 (2016).

56. “Room-temperature Y-type emission of perylenes by encapsulation within single-walled carbon nanotubes”,

M. Tange,* **T. Okazaki**, Z. Liu, K. Suenaga and S. Iijima

Nanoscale, 8, 7834-7839 (2016).

57. “Flexible CMOS-Like Circuits Based on Printed P-type and N-type Carbon Nanotube Thin-Film Transistors”

X. Zhang, J. Zhao, J. Dou, M. Tange, W. Xu, L. Mo, J. Xie, W. Xu, C. Ma, **T. Okazaki**, Z. Cui*

Small, 12, 5066-5073 (2016).

58. "Spectroscopy of reactive species produced by low-energy atmospheric-pressure plasma on conductive target material surface "
H. Yamada, H. Sakakita, S. Kato, J. Kim, S. Kiyama, M. Fujiwara, H. Itagaki, **T. Okazaki**, S. Ikehara, H. Nakanishi, N. Shimizu and Y. Ikehara
J. Phys. D: Appl. Phys., 49, 394001 (2016).
59. "Thermal Stability of Oxidized Single-Walled Carbon Nanotubes: Competitive Elimination and Decomposition Reaction Depending on the Degree of Functionalization"
Y. Maeda,* E. Sone, A. Nishino, Y. Amagai, W.-W. Wang, M. Yamada, M. Suzuki, J. Matsui, M. Mitsuishi, **T. Okazaki** and S. Nagase*
Chem. Eur. J., 22, 15373–15379 (2016).
60. "Printed thin-film transistors and NO₂ gas sensors based on sorted semiconducting carbon nanotubes by isoindigo-based copolymer"
C. Zhou, J. Zhao,* J. Ye, M. Tange, X. Zhang, W. Xu, K. Zhang, **T. Okazaki**, Z. Cui,
Carbon, 108, 372-380 (2016).
61. "Temperature dependence of plasmon resonance in single-walled carbon nanotubes"
T. Morimoto, Y. Ikeda, M. Ichida, **T. Okazaki***
Phys. Rev. B, 93, 195409 (2016).
62. "Preparation of Small-Sized Graphene Oxide Sheets from Carbon Nanohorns and Their Biological Applications"
M. Zhang,* **T. Okazaki**, Y. Iizumi, E. Miyako, R. Yuge, S. Bandow, S. Iijima and M. Yudasaka
J. Mater. Chem. B, 4, 121-127 (2016).
63. "Single-Walled Carbon Nanotube Synthesis using Pt Catalysts under Low Ethanol Pressure via Cold-Wall Chemical Vapor Deposition in High Vacuum"
T. Maruyama,* H. Kondo, R. Ghosh, A. Kozawa, S. Naritsuka, **T. Okazaki**, S. Iijima
Carbon, 96, 6-13 (2016).

2015

64. "Sorting semiconducting single walled carbon nanotubes by poly(9,9-dioctylfluorene) derivatives and application for ammonia gas sensing"
X. Zhang, J. Zhao, M. Tange, W. Xu, W. Xu, K. Zhang, W. Guo, **T. Okazaki**, Z. Cui*

Carbon, 94, 903-910 (2015).

65. "Preparation and functionalization of boron nitride containing carbon nanohorns for boron neutron capture therapy"

Y. Iizumi, **T. Okazaki***, M. Zhang, R. Yuge, T. Ichihashi, M. Nakamura, Y. Ikehara, S. Iijima, M. Yudasaka*. *Carbon*. 93, 595-603 (2015).

66. "Optical Resonance in Far-Infrared Spectra of Multi-Walled Carbon Nanotubes"

T. Morimoto and **T. Okazaki***

Appl. Phys. Exp., 8, 055101 (2015).

2014

67. "Energetics and Electronic Structures of Carbon Nanotubes Encapsulating Polycyclic Aromatic Hydrocarbon Molecules"

S. Kigure, Y. Iizumi, **T. Okazaki** and S. Okada*

J. Phys. Soc. Jpn., 83, 124709 (2014).

68. "Length Dependent Plasmon Resonance in Single-Walled Carbon Nanotubes"

T. Morimoto, S.-K. Joung, T. Saito, D. N. Futaba, K. Hata and **T. Okazaki***

ACS Nano, 8(10), 9897-9904 (2014).

69. "Single molecular spectroscopy: Identification of individual fullerene molecules"

L. H. G. Tizei, Z. Liu, M. Koshino, Y. Iizumi, **T. Okazaki** and K. Suenaga*

Phys. Rev. Lett., 113, 185502 (2014).

70. "Diameter-Selective Electron Transfer from Encapsulated Ferrocenes to Single-Walled Carbon Nanotubes"

Y. Iizumi, H. Suzuki, M. Tange and **T. Okazaki***

Nanoscale, 6, 13910-13914 (2014).

71. "Extraction of Semiconducting Single-Walled Carbon Nanotubes Encapsulating Fullerenes by Poly (9,9-dioctylfluorene-alt-benzothiadiazole) "

M. Tange,* J. K. Kwon, **T. Okazaki*** and S. Iijima

Jpn. J. Appl. Phys., 53, 045101 (2014).

72. "Spectroscopic Characterization of Nanohybrids Consisting of Single-walled Carbon Nanotube and Fullerodendron"

H. Suzuki, Y. Iizumi, M. Tange, S.-K. Joung, A. Furube, T. Wada, T. Tajima, Y. Takaguchi and **T. Okazaki***
Fullerenes, Nanotubes and Carbon Nanostructures (Prof. Takeshi Akasaka's Festschrift), 22, 44-56
(2014).

73. "Influence of structure-selective fluorene-based polymer wrapping on optical transitions of single-wall carbon nanotubes"
M. Tange,* **T. Okazaki*** and S. Iijima
Nanoscale, 6, 248-254 (2014).

2013

74. "Self-Assembled Carbon Nanotube Honeycomb Networks Using a Butterfly Wing Template as a Multifunctional Nanobiohybrid"
E. Miyako, T. Sugino, **T. Okazaki**, A. Bianco, M. Yudasaka, and S. Iijima
ACS Nano, 7(10), 8736-8742 (2013).

75. "Ordered and disordered packing of coronene molecules in carbon nanotubes"
B. Verberck, **T. Okazaki** and N. V. Tarakina
Phys. Chem. Chem. Phys., 15, 18108 (2013).

76. "Immunoassay with Single-Walled Carbon Nanotubes as Near-Infrared Fluorescent Labels"
Y. Iizumi, **T. Okazaki**,* Y. Ikehara, M. Ogura, S. Fukata and M. Yudasaka*
ACS Appl. Mater. Interfaces, 5, 7665-7670 (2013).

77. "Photoemission study of the electronic structure of azafullerene encapsulated single-walled carbon nanotubes"
H. Yagi, Y. Tokumoto, M. Zenki, T. Zaima, T. Miyazaki, G. Rotas, N. Tagmatarchis, Y. Iizumi, **T. Okazaki**
and S. Hino*
Chem. Phys. Lett., 570, 100-103 (2013).

78. "Depolarized Dynamic Light Scattering Study of Multi-Walled Carbon Nanotubes in Solution"
T. Eitoku, M. Tange, H. Kato and **T. Okazaki***
Mater. Exp., 3, 37-42 (2013).

2012

79. "Selective extraction of semiconducting single-wall carbon nanotubes by poly(9,9-dioctylfluorene-*alt*-pyridine) for 1.5 μm emission"

M. Tange, **T. Okazaki** and S. Iijima

ACS Appl. Mater. Interfaces, 4(12), 6458-6462 (2012).

80. "Weak Response of Metallic Single-Walled Carbon Nanotubes to C₆₀ Encapsulation Studied by Resonance Raman Spectroscopy"

S.-K. Joung, **T. Okazaki**,* S. Okada and S. Iijima

J. Phys. Chem. C, 116, 23844-23850 (2012).

81. "Dimerization-Initiated Preferential Formation of Coronene-Based Graphene Nanoribbons in Carbon Nanotubes"

M. Fujihara, Y. Miyata, R. Kitaura, Y. Nishimura, C. Camacho, S. Irle, Y. Iizumi, **T. Okazaki** and H. Shinohara

J. Phys. Chem. C, 116, 15141-15145 (2012).

82. "Counting Photons Emitted from Single Er Atoms in Energy Dispersive X-ray Spectroscopy"

K. Suenaga, **T. Okazaki**, E. Okunishi and S. Matsumura

Nature Photonics, 6, 545-548 (2012).

83. "Single Chirality Purification of Single Wall Carbon Nanotubes for the Encapsulation of Organic Molecules"

M. Kawai, T. Suzuki, T. Igarashi, H. Suzuki, **T. Okazaki**, H. Kataura, Y. Maniwa and K. Yanagi

J. Am. Chem. Soc., 134, 9545-9548 (2012).

84. "Transparent conductive thin films of single-wall carbon nanotubes encapsulating dopant molecules

N. Kishi, I. Miwa, **T. Okazaki**, T. Saito, T. Mizutani, H. Tsuchiya, T. Soga and T. Jimbo

Appl. Phys. Lett., 100, 063121 (2012).

2011

85. "Single-molecule sensing electrode embedded in-plane nanopore"

M. Tsutsui, S. Rahong, Y. Iizumi, **T. Okazaki**, M. Taniguchi and T. Kawai

Sci. Rep. 1, 46; DOI:10.1038/srep00046 (2011).

86. "Selective extraction of large-diameter single-wall carbon nanotubes with specific chiral indices by poly(9,9-dioctylfluorene-alt-benzothiadiazole)"

M. Tange, **T. Okazaki** and S. Iijima

J. Am. Chem. Soc., 133, 11908-11911 (2011).

87. "Origin of the n-type Transport Behavior of Azafullerenes Encapsulated in Single-Walled Carbon Nanotubes"
N. T. Cuong, M. Otani, Y. Iizumi, **T. Okazaki**, G. Rotas, N. Tagmatarchis, Y. Li, T. Kaneko, R. Hatakeyama and S. Okada
Appl. Phys. Lett., 99, 053105 (2011).
88. "Single Atom Spectroscopy with Reduced Delocalization Effect Using a 30kV-STEM"
K. Suenaga, Y. Iizumi and **T. Okazaki**
Eur. Phys. J. Appl. Phys., 54, 33508 (2011).
89. "Coaxially Stacked Coronene Column inside Single-Walled Carbon Nanotube"
T. Okazaki,* Y. Iizumi, S. Okubo, H. Kataura, Z. Liu, K. Suenaga, Y. Tahara, M. Yudasaka, S. Okada and S. Iijima.
Angew. Chem. Int. Ed., 50, 4853-4857 (2011).
90. "Ultra-narrow WS₂ nanoribbons encapsulated in carbon nanotubes"
Z. Wang, K. Zhao, H. Li, Z. Liu, Z. Shi, J. Lu, K. Suenaga, S.-K. Joung, **T. Okazaki**, Z. Jin, Z. Gu, Z. Gao and S. Iijima
J. Mater. Chem., 21, 171-180 (2011).

2010

91. "Microwave Assisted Covalent Functionalization of C₆₀@SWCNT Peapods "
N. Karousis, S. P. Economopoulos, Y. Iizumi, **T. Okazaki**, Z. Liu, K. Suenaga and N. Tagmatarchis
Chem. Commun., 46, 9110-9112 (2010).
92. "Electronic Structures of Single-Wall Carbon Nanotubes Encapsulating Ellipsoidal C₇₀"
S. Okubo, **T. Okazaki**,* K. Hirose-Takai, K. Suenaga, S. Okada, S. Bandow and S. Iijima
J. Am. Chem. Soc., 132, 15252-15258 (2010).
93. "Mixed Low-dimensional Nanomaterial: 2D MoS₂ Inorganic Nanoribbons Encapsulated in Quasi-1D Carbon Nanotubes "
Z. Wang, H. Li, Z. Liu, Z. Shi, J. Lu, K. Suenaga, S.-K. Joung, **T. Okazaki**, Z. Gu, J. Zhou, Z. Gao, G. Li, S. Sanvito, E. Wang and S. Iijima
J. Am. Chem. Soc., 132, 13840-13847 (2010).
94. "Host-Guest Interaction between Single-Wall Carbon Nanotubes and Encapsulated C₆₀ Probed by Resonance

Raman Spectroscopy”

S.-K. Joung, **T. Okazaki**,* S. Okada and S. Iijima

phys. stat. sol. (b), 247, 2700-2702 (2010).

95. “Intermolecular Interaction between Single-Wall Carbon Nanotube and Encapsulated C₆₀ Probed by Resonance Raman Spectroscopy”

S.-K. Joung, **T. Okazaki**,* S. Okada and S. Iijima

Phys. Chem. Chem. Phys., 12, 8118-8122 (2010).

96. “Fundamental Importance of Background Analysis in Precise Characterization of Single-Walled Carbon Nanotubes by Optical Absorption Spectroscopy”

S. Ohmori, T. Saito, M. Tange, B. Shukla, **T. Okazaki**, M. Yumura and S. Iijima

J. Phys. Chem. C, 114 (22), 10077–10081 (2010).

97. “Host-Guest Interactions in Azafullerene (C₅₉N)–Single-Wall Carbon Nanotube (SWCNT) Peapod Hybrid Structures”

Y. Iizumi, **T. Okazaki**,* Z. Liu, K. Suenaga, T. Nakanishi, S. Iijima, G. Rotas and N. Tagmatarchis

Chem. Commun, 46, 1293-1295 (2010).

98. “Towards imaging atomic resolved molecular reactions: study of fullerene dimerization”

M. Koshino, Y. Niimi, E. Nakamura, H. Kataura, **T. Okazaki**, K. Suenaga and S. Iijima

Nature Chem., 2, 117-124 (2010).

2009

99. “Visualizing and identifying single atoms using electron energy-loss spectroscopy with low accelerating voltage “

K. Suenaga, Y. Sato, Z. Liu, H. Kataura, **T. Okazaki**, K. Kimoto, H. Sawada, T. Sasaki, K. Omoto, T. Tomita, T. Kaneyama and Y. Kondo

Nature Chem., 1(5), 415-418 (2009).

100. “Fullerene Encapsulation Effects on Radial Breathing Mode Frequencies of Single-Walled Carbon Nanotubes”

S.-K. Joung, **T. Okazaki**,* N. Kishi, S. Okada, S. Bandow, and S. Iijima

Phys. Rev. Lett., 103, 027403 (2009).

101. “Self-assembled Double Ladder Structure Formed Inside Carbon Nanotubes by Encapsulation of H₈Si₈O₁₂”

Z. Liu, S.-K. Joung, **T. Okazaki**, K. Suenaga, Y. Hagiwara, T. Ohsuna, K. Kuroda and S. Iijima
ACS Nano, 3, 1160-1166 (2009).

102. "Tuning of Electronic Properties of Single-Walled Carbon Nanotubes under Homogenous Conditions"
Y. Maeda, A. Sagara, M. Hashimoto, Y. Hirashima, K. Sode, T. Hasegawa, M. Kanda, M. O. Ishitsuka, T. Tsuchiya, T. Akasaka, **T. Okazaki**, H. Kataura, J. Lu, S. Nagase and S. Takeuchi
ChemPhysChem, 10, 926-930 (2009).

103. "Mono-dispersed single-walled carbon nanotubes made by using arc-burning method in nitrogen atmosphere"
S. Suzuki, T. Mizusawa, **T. Okazaki** and Y. Achiba
Eur. Phys. J., 52, 83-86 (2009).

104. "Diameter-Selective Interaction between Single-Walled Carbon Nanotubes and Encapsulated Fullerenes"
S. Okubo, **T. Okazaki**, N. Kishi, S.-K. Joung, T. Nakanishi, S. Okada and S. Iijima
J. Phys. Chem. C, 113, 571-575 (2009).

2008

105. "C₆₀(OH)_n-Assisted Dispersion of Single-Walled Carbon Nanotubes"
Y. Maeda, T. Kato, J. Higo, T. Hasegawa, T. Kitano, T. Tsuchiya, T. Akasaka, **T. Okazaki**, J. Lu and S. Nagase
Nano, 3(6), 455-459 (2008).

106. "High Efficiencies for Singlet Oxygen Generation of Fullerenes and Their Phototoxicity"
Y. Iizumi, **T. Okazaki**, M. Zhang, M. Yudasaka and S. Iijima
Bull. Chem. Soc. Jpn., 81(12), 1584-1588 (2008).

107. "Semiconductor-enriched single wall carbon nanotube networks applied to field effect transistors"
N. Izard, S. Kazaoui, K. Hata, **T. Okazaki**, T. Saito, S. Iijima and N. Minami
Appl. Phys. Lett., 92, 243112 (2008).

108. "Optical Band Gap Modification of Single-Walled Carbon Nanotubes by Encapsulated Fullerenes"
T. Okazaki, S. Okubo, T. Nakanishi, S.-K. Joung, T. Saito, M. Otani, S. Okada, S. Bandow and S. Iijima
J. Am. Chem. Soc., 130(12), 4122-4128 (2008).

109. "Metallic Wires of Lanthanum Atoms Inside Carbon Nanotubes"

L. Guan, K. Suenaga, S. Okubo, **T. Okazaki** and S. Iijima
J. Am. Chem. Soc., 130, 2162-2163 (2008).

110. "Atom-like behaviors and orbital-related Tomonaga-Luttinger liquids in carbon nano-peapod quantum dots"
J. Mizubayashi, J. Haruyama, I. Takesue, **T. Okazaki**, H. Shinohara, Y. Harada and Y. Awano
Microelectronics J., 39, 222-227 (2008).

111. "Selective Diameter Control of Single-Walled Carbon Nanotubes in the Gas-Phase Synthesis"
T. Saito, S. Ohshima, **T. Okazaki**, S. Ohmori, M. Yumura and S. Iijima
J. Nanosci. and Nanotechnol., 8(11), 6153-6157 (2008).

2007

112. "Enhanced 1520 nm Photoluminescence from Er³⁺ Ions in Di-erbium-carbide Metallofullerenes (Er₂C₂)@C₈₂ (Isomers I, II, and III)"
Y. Ito, **T. Okazaki**, S. Okubo, M. Akachi, Y. Ohno, T. Mizutani, T. Nakamura, R. Kitaura, T. Sugai and H. Shinohara
ACS Nano, 1(5), 456-462 (2007).

113. "Structure of D_{5d}-C₈₀ and I_h-Er₃N@C₈₀ Fullerenes and Their Rotation Inside Carbon Nanotubes Demonstrated by Aberration-Corrected Electron Microscopy"
Y. Sato, K. Suenaga, S. Okubo, **T. Okazaki** and S. Iijima
Nano Lett., 7(12), 3704-3708 (2007).

114. "Coalescence of C₆₀ Molecules Assisted by Doped Iodine Inside Carbon Nanotubes"
L. Guan, K. Suenaga, **T. Okazaki**, Z. Shi, Z. Gu and S. Iijima
J. Am. Chem. Soc., 129, 8954-8955 (2007).

115. "Magnetic Properties and Crystal Structure of Solvent-Free Sc@C₈₂ Metallofullerene Microcrystals"
Y. Ito, W. Fujita, **T. Okazaki**, T. Sugai, K. Awaga, E. Nishibori, M. Takata, M. Sakata and H. Shinohara
ChemPhysChem., 8, 1019 – 1024 (2007).

116. "Anomalous Coulomb diamonds and power-law behavior sensitive to back-gate voltages in carbon nanoscale peapod quantum dots"
J. Mizubayashi, J. Haruyama, I. Takesue, **T. Okazaki**, H. Shinohara, Y. Harada and Y. Awano
Phys. Rev. B, 75(20), 205431 (2007).

117. "Endohedral Metallofullerenes as Strong Singlet Oxygen Quenchers"
K. Yanagi, S. Okubo, **T. Okazaki** and H. Kataura
Chem. Phys. Lett., 435, 306-310 (2007).
118. "Gate-controlled Tomonaga-Luttinger liquid and atomic-like behaviors in peapod quantum dots"
J. Mizubayashi, J. Haruyama, I. Takesue, **T. Okazaki**, H. Shinohara, Y. Harada and Y. Awano
Solid State Phenomena, 121-123, 545-548 (2007).

2006

119. "Interaction Control between Endohedral Metallofullerene and Metal Substrate by Introducing Alkanethiol Self-assembled Monolayer"
Y. Yasutake, Z. Shi, **T. Okazaki**, H. Shinohara and Y. Majima
J. Nanoscience and Nanotechnology, 6, 3460-3463 (2006).
120. "Deactivation of singlet oxygen by single-wall carbon nanohorns"
K. Yanagi, **T. Okazaki**, Y. Miyata and H. Kataura
Chem. Phys. Lett., 431, 145-148 (2006).
121. "Photoluminescence Quenching in Peapod-Derived Double-Walled Carbon Nanotubes"
T. Okazaki, S. Bandow, G. Tamura, Y. Fujita, K. Iakoubovskii, S. Kazaoui, N. Minami, T. Saito, K. Suenaga and S. Iijima
Phys. Rev. B, 74(15), 153404 (2006).
122. "Selectivity of water-soluble proteins in single-walled carbon nanotube dispersions"
K. Matsuura, T. Saito, **T. Okazaki**, S. Ohshima, M. Yumura and S. Iijima
Chem. Phys. Lett., 429, 497-502 (2006).
123. "Dispersion and Separation of Single-Walled Carbon Nanotubes"
Y. Maeda, M. Kanda, M. Hashimoto, T. Hasegawa, S. Kimura, Y. Lian, T. Wakahara, T. Akasaka, S. Kazaoui, N. Minami, **T. Okazaki**, Y. Hayamizu, K. Hata, J. Lu and S. Nagase
J. Am. Chem. Soc., 128, 12239-12242 (2006).
124. "Photoluminescence and Population Analysis of Single-Walled Carbon Nanotubes produced by CVD and Pulsed-Laser Vaporization Methods"
T. Okazaki, T. Saito, K. Matsuura, S. Ohshima, M. Yumura, Y. Oyama, R. Saito, and S. Iijima
Chem. Phys. Lett., 420, 286-290 (2006).

Listed in TOP25 articles in *Chem. Phys. Lett.* (JAN-MAR 2006).

125. "Purification and characterization of double-wall carbon nanotubes synthesized by catalytic chemical vapor deposition on mesoporous silica"
P. Ramesh, **T. Okazaki**, T. Sugai, J. Kimura, N. Kishi, K. Sato, Y. Ozeki, and H. Shinohara
Chem. Phys. Lett., 418, 408-412 (2006).

2005

126. "Entrapping of Exohedral Metallofullerenes in Carbon Nanotubes: (CsC₆₀)_n@SWNT Nano-Peapods"
B.-Y. Sun, Y. Sato, K. Suenaga, **T. Okazaki**, N. Kishi, T. Sugai, S. Bandow, S. Iijima and H. Shinohara
J. Am. Chem. Soc., 127, 17972-17973 (2005).
127. "Photoluminescence Mappings of "As-Grown" Single-Walled Carbon Nanotubes: A Comparison with Micelle-Encapsulated Nanotube Solutions"
T. Okazaki, T. Saito, K. Matsuura, S. Ohshima, M. Yumura and S. Iijima
Nano Lett., 5(12), 2618-2623 (2005).
128. "Fabrication and Characterization of Peapod Field-Effect Transistors Using Peapods Synthesized Directly on Si Substrate"
Y. Kurokawa, Y. Ohno, T. Shimada, M. Ishida, S. Kishimoto, **T. Okazaki**, H. Shinohara and T. Mizutani
Jpn. J. Appl. Phys., 44(43), L1341-L1343 (2005).
129. "Single Molecular Orientation Switching of Endohedral Metallofullerene"
Y. Yasutake, Z. Shi, **T. Okazaki**, H. Shinohara and Y. Majima
Nano Lett., 5(6), 1057-1060 (2005).
130. "Ultraviolet photoelectron spectroscopy of multiple atoms encapsulated fullerenes"
S. Hino, N. Wanita, M. Kato, K. Iwasaki, D. Yoshimura, T. Inoue, **T. Okazaki** and H. Shinohara
J. Electron Spectroscopy and Related Phenomena, 144-147, 239-242 (2005).
131. "CVD Growth of Single-Walled Carbon Nanotubes with Narrow Diameter Distribution over Fe/MgO Catalyst and Their Fluorescence Spectroscopy"
H. Ago, S. Imamura, **T. Okazaki**, T. Saito, M. Yumura, and M. Tsuji
J. Phys. Chem. B, 109(20), 10035 – 10041 (2005).
132. "Selective Chemical Vapor Deposition Synthesis of Double-Wall Carbon Nanotubes on Mesoporous Silica"

P. Ramesh, **T. Okazaki**, R. Taniguchi, J. Kimura, T. Sugai, K. Sato, Y. Ozeki, and H. Shinohara
J. Phys. Chem. B, 109(3), 1141-1147 (2005).

133. "Synthesis of carbon nanotube peapods directly on Si substrates"

Y. Ohno, Y. Kurokawa, S. Kishimoto, T. Mizutani, T. Shimada, M. Ishida, **T. Okazaki**, H. Shinohara, Y. Murakami, S. Maruyama, A. Sakai and K. Hiraga
Appl. Phys. Lett., 86, 023109 (2005).

134. "Tunable Field-Effect Transistors Device with Metallofullerene Nanopeapods"

T. Shimada, Y. Ohno, K. Suenaga, **T. Okazaki**, S. Kishimoto, T. Mizutani R. Taniguchi, H. Kato, B.-P. Cao, T. Sugai and H. Shinohara
Jpn. J. Appl. Phys., 44(1A), 469-472 (2005).

2004

135. "Ultraviolet Photoelectron Spectra of Tb@C₈₂"

K. Iwasaki, N. Wanita, S. Hino, D. Yoshimura, **T. Okazaki** and H. Shinohara
Chem. Phys. Lett., 398(4-6), 389-392 (2004).

136. "Ultraviolet Photoelectron Spectra of Ti₂@C₈₀"

K. Iwasaki, S. Hino, D. Yoshimura, B. Cao, **T. Okazaki** and H. Shinohara
Chem. Phys. Lett., 397(1-3), 169-173 (2004).

137. "Ultraviolet Photoelectron Spectroscopy of Two Titanium Metal Atoms Encapsulated Metallofullerenes, Ti₂@C₈₀ and Ti₂@C₈₄"

S. Hino, K. Iwasaki, N. Wanita, D. Yoshimura, B. Cao, **T. Okazaki** and H. Shinohara
Fullerenes, Nanotubes, and Carbon Nanostructures, 12(1-2), 33-39 (2004).

138. "Synthesis and Characterization of Eu-Metallofullerenes from Eu@C₇₄ to Eu@C₉₀ and Their Nano-Peapods"

B.-Y. Sun, T. Inoue, T. Shimada, **T. Okazaki**, T. Sugai, K. Suenaga and H. Shinohara
J. Phys. Chem. B, 108, 9011-9015 (2004).

139. "Fabrication technique for carbon nanotube single-electron transistors using focused ion beam"

Y. Kurokawa, Y. Ohno, S. Kishimoto, **T. Okazaki**, H. Shinohara, T. Mizutani
Jpn. J. Appl. Phys., 43(8A), 5669-5670 (2004).

140. "Trapping a C₂ Radical in Endohedral Metallofullerenes: Synthesis and Structures of (Y₂C₂)@C₈₂ (isomers

I, II and III)”

T. Inoue, T. Tomiyama, T. Sugai, **T. Okazaki**, T. Suematsu, N. Fujii, H. Utsumi, K. Nojima and H. Shinohara
J. Phys. Chem. B, 108(23), 7573-7579 (2004).

141. “Double-wall carbon nanotube field effect transistors: Ambipolar transport characteristics”

T. Shimada, T. Sugai, Y. Ohno, S. Kishimoto, T. Mizutani, H. Yoshida, **T. Okazaki** and H. Shinohara
Appl. Phys. Lett., 84(13), 2412-2414 (2004).

142. “Transport properties of C₇₈, C₉₀ and Dy@C₈₂ fullerenes-nanopeapods by field effect transistors”

T. Shimada, Y. Ohno, **T. Okazaki**, T. Sugai, K. Suenaga, S. Kishimoto, T. Mizutani, T. Inoue, R. Taniguchi, N. Fukui, H. Okubo and H. Shinohara
Physica E, 21, 1089-1092 (2004).

143. “Chirality assignment of individual single-walled carbon nanotubes in carbon nanotube field-effect transistors by micro-photocurrent spectroscopy”

Y. Ohno, S. Kishimoto, T. Mizutani, **T. Okazaki** and H. Shinohara
Appl. Phys. Lett., 84(8), 1368-1370 (2004).

144. “Syntheses of Single- and Double-Wall Carbon Nanotubes by the HTPAD and HFCVD Methods”

T. Sugai, **T. Okazaki**, H. Yoshida and H. Shinohara
New J. Phys., 6, 21 (2004).

2003

145. “Selective synthesis of double-wall carbon nanotubes by CCVD of acetylene using zeolite supports”

T. Hiraoka, T. Kawakubo, J. Kimura, R. Taniguchi, A. Okamoto, **T. Okazaki**, T. Sugai, Y. Ozeki, M. Yoshikawa and H. Shinohara
Chem. Phys. Lett., 382, 679-685 (2003).

146. “Evidence for substantial interaction between Gd ion and SWNT in (Gd@C₈₂)_n@SWNT peapods revealed by STM studies”

K. Kimura, N. Ikeda, Y. Maruyama, **T. Okazaki**, H. Shinohara, S. Bandow and S. Iijima
Chem. Phys. Lett., 379, 340-344 (2003).

147. “Evidence for the intermolecular motion of Gd atoms in a Gd₂@C₉₂ nanopeapod”

K. Suenaga, R. Taniguchi, T. Shimada, **T. Okazaki**, H. Shinohara and S. Iijima
Nano Lett., 3(10), 1395-1398 (2003).

148. "Position-controlled carbon nanotube field-effect transistors fabricated by chemical vapor deposition using patterned metal catalyst"
Y. Ohno, S. Iwatsuki, T. Hiraoka, **T. Okazaki**, S. Kishimoto, K. Maezawa, H. Shinohara and T. Mizutani
Jpn. J. Appl. Phys., 42, 4116-4119 (2003).
149. "Raman spectroscopy of La₂@C₈₀ and Ti₂@C₈₀ dimetallofullerenes"
R. Jaffiol, A. Débarre, C. Julien, D. Nutarelli, P. Tchénio, A. Taninaka, B. Cao, **T. Okazaki**, and H. Shinohara
Phys. Rev. B, 68, 014105 (8 pages) (2003).
150. "Synthesis and Characterization of Single-Wall Carbon Nanotubes by Hot-Filament Assisted Chemical Vapor Deposition (HFCVD)"
T. Okazaki and H. Shinohara
Chem. Phys. Lett., 376(5-6), 606-611 (2003).
151. "New Synthesis of High-Quality Double-Walled Carbon Nanotubes by High-Temperature Pulsed Arc Discharge"
T. Sugai, H. Yoshida, T. Shimada, **T. Okazaki**, H. Shinohara and S. Bandow
Nano Lett., 3(6), 769-773 (2003).
152. "High-Resolution Electron Microscopy of Individual Metallofullerene Molecules on the Dipole Orientations in Peapods"
K. Suenaga, **T. Okazaki**, K. Hirahara, S. Bandow, H. Shinohara and S. Iijima
Appl. Phys. A, 76, 445-447 (2003).
153. "Electronic Properties of Gd@C₈₂ Metallofullerene Peapods: (Gd@C₈₂)_n@SWNTs"
T. Okazaki, T. Shimada, K. Suenaga, Y. Ohno, T. Mizutani, J. Lee, Y. Kuk and H. Shinohara
Appl. Phys. A, 76, 475-478 (2003).
154. "High Yield Catalytic Synthesis of Terbium Metallofullerenes and a Spontaneous Production of Single-Wall Carbon Nanotubes"
Z. Shi, **T. Okazaki**, T. Shimada, T. Sugai, K. Suenaga and H. Shinohara
J. Phys. Chem. B, 107(11), 2485-2489 (2003).
155. "Direct Imaging of Sc₂@C₈₄ Molecules Encapsulated Inside Single-Wall Carbon Nanotubes by High

Resolution Electron Microscopy with Atomic Sensitivity”

K. Suenaga, **T. Okazaki**, C.-R. Wang, S. Bandow, H. Shinohara and S. Iijima

Phys. Rev. Lett., 90(5), 055506 (4 pages) (2003).

2002

156. “Synthesis and Characterization of Multi- and Single-Wall Carbon Nanotubes by the Catalytic Vapor Deposition Method”

A. Okamoto, T. Kawakubo, T. Hiraoka, **T. Okazaki**, T. Sugai and H. Shinohara

Mol. Cryst. Liq. Cryst., 387, 93-98 (2002).

157. “Ambipolar Field-Effect Transistor Behavior of Gd@C₈₂ Metallofullerene Peapods”

T. Shimada, **T. Okazaki**, R. Taniguchi, T. Sugai, H. Shinohara, K. Suenaga, Y. Ohno, S. Mizuno, S. Kishimoto and T. Mizutani

Appl. Phys. Lett., 81, 4067-4069 (2002).

158. “Electronic and Geometric Structures of Metallofullerene Peapods”

T. Okazaki, K. Suenaga, K. Hirahara, S. Bandow, S. Iijima and H. Shinohara

Physica B, 323, 97-99 (2002).

159. “Production, Isolation and EELS Characterization of Ti₂@C₈₄ Di-Titanium metallofullerenes”

B. Cao, K. Suenaga, **T. Okazaki** and H. Shinohara

J. Phys. Chem. B, 106, 9295-9298 (2002).

160. “Band Gap Modulation of Carbon Nanotubes by Encaptured Metallofullerenes”

J. Lee, H. J. Kim, G. Kim, Y.-W. Son, J. Ihm, S. J. Kahng, H. Kato, Z.W. Wang, **T. Okazaki**, H. Shinohara and Y. Kuk

Nature, 415, 1005-1008 (2002).

2001

161. “Smallest Limit of Tube Diameters for Encasing of Particular Fullerenes Determined by Radial Breathing Mode Raman Scattering”

S. Bandow, M. Takizawa, H. Kato, **T. Okazaki**, H. Shinohara and S. Iijima

Chem. Phys. Lett., 347, 23-28 (2001).

162. “EELS and ¹³C-NMR Characterization of Pure Ti₂@C₈₀ Metallofullerene”

B. Cao, M. Hasegawa, K. Okada, T. Tomiyama, **T. Okazaki**, K. Suenaga and H. Shinohara

J. Am. Chem. Soc., 123(39), 9679-9680 (2001).

163. "Real Time Reaction Dynamics in Carbon Nanotubes"

T. Okazaki, K. Suenaga, K. Hirahara, S. Bandow, S. Iijima and H. Shinohara
J. Am. Chem. Soc., 123(39), 9673-9674 (2001).

164. "Electron Diffraction Study of One-Dimensional Crystals of Fullerenes"

K. Hirahara, S. Bandow, K. Suenaga, H. Kato, **T. Okazaki**, H. Shinohara and S. Iijima
Phys. Rev. B, 64(11), 115420 (5 pages) (2001).

165. "Intrafullerene electron transfers in Sm-containing metallofullerenes: Sm@C_{2n} (74 ≤ 2n ≤ 84)"

T. Okazaki, K. Suenaga, Y. Lian, Z. Gu and H. Shinohara
J. Mol. Graphics Modell., 19(2), 244-251 (2001).

2000

166. "Element-selective single atom imaging"

K. Suenaga, M. Tencé, C. Mory, C. Colliex, H. Kato, **T. Okazaki**, H. Shinohara, K. Hirahara, S. Bandow and S. Iijima
Science, 290(5500), 2280-2282 (2000).

167. "One dimensional metallofullerenes crystal generated inside single-walled carbon nanotube"

K. Hirahara, K. Suenaga, S. Bandow, H. Kato, **T. Okazaki**, H. Shinohara and S. Iijima
Phys. Rev. Lett., 85(25), 5384-5387 (2000).

168. "Direct EELS observation of the oxidation states of Sm atoms in Sm@C_{2n} metallofullerenes (74 ≤ 2n ≤ 84)"

T. Okazaki, K. Suenaga, Y. Lian, Z. Gu and H. Shinohara
J. Chem. Phys. 113(21), 9593-9597 (2000).

169. "Isolation and Spectroscopic Characterization of Sm-Containing Metallofullerenes"

T. Okazaki, Y. Lian, Z. Gu, K. Suenaga and H. Shinohara
Chem. Phys. Lett., 320, 435-440 (2000).

1999

170. "Spatially Resolved Thermalization Dynamics of Electronically Photoexcited Azulene Probed by a Molecular Integrated Thermometer"

T. Okazaki, N. Hirota, T. Nagata, A. Osuka and M. Terazima,

J. Phys. Chem. A, 103(48), 9591-9600 (1999).

171. "High Temporally and Spatially Resolved Thermal Energy Detection after Nonradiative Transition in Solution Using a Molecular Heater-Molecular Thermometer Integrated System"

T. Okazaki, N. Hirota, T. Nagata, A. Osuka and M. Terazima

J. Am. Chem. Soc., 121(21), 5079-5080 (1999).

172. "Thermalization Process after the Relaxation of Electronically Excited States: Intramolecular Proton Transfer Systems Studied by the Transient Grating Method"

T. Okazaki, N. Hirota and M. Terazima

J. Chem. Phys., 110(23), 11399-11410 (1999).

1997

173. "Picosecond Time-Resolved Transient Grating Method for Heat Detection: Excited-State Dynamics of FeCl₃ and *o*-Hydroxybenzophenone in Aqueous Solution"

T. Okazaki, N. Hirota and M. Terazima

J. Phys. Chem. A, 101(4), 650-655 (1997).

1996

174. "Dynamics of Aggregate Formation and Translational Diffusion of a Spiropyran Studied by the Transient Grating Method"

T. Okazaki, N. Hirota and M. Terazima

J. Photochem. Photobio. A, 99, 155-163 (1996).

1995

175. "Translational Diffusion Process of Charged Radicals: *N,N,N',N'*-tetramethyl-*p*-phenylenediamine and its cation radical"

M. Terazima, **T. Okazaki** and N. Hirota

J. Photochem. Photobio. A, 92, 7-12 (1995).