April 10, 2018

Publication List
Kazuaki Furukawa, Meisei University

Original papers

(1) W. Choi, H. Nishiyama, Y. Ogawa, Y. Ueno, **K. Furukawa**, T. Takeuchi, Y. Tsutsui, T. Sakurai, S. Seki
O Relaxation of Plasma Carriers in Graphene: An Approach by Frequency-Dependent Optical Conductivity Measurement
Adv. Opt. Mater. (2018).

(2) Y. Ueno, **K. Furukawa**
On-chip FRET Graphene Aptasensor
Int. J. Automation Technol. 12, 37-44 (2018).

(3) **K. Furukawa**, T. Teshima, Y. Ueno
Self-propelled ion gel at air-water interface
Sci. Rep. 7, 9323 (2017).

(4) K. Nishiguchi, D. Yoshizumi, Y. Sekine, **K. Furukawa**, A. Fujiwara, M. Nagase
Planar cold cathode based on a multilayer-graphene/SiO_2/Si heterodevice
Appl. Phys. Express 9, 105101 (2016).

(5) M. Takamura, H. Okamoto, **K. Furukawa**, H. Yamaguchi, H. Hibino
Energy Dissipation in Graphene Mechanical Resonators with and without Free Edges
Micromachines 7, 157-168 (2016).

(6) **K. Furukawa**, Y. Ueno, M. Takamura, H. Hibino
Graphene FRET Aptasensor
ACS Sens. 1, 710−716 (2016).

(7) **K. Furukawa**
Pattern Formation of Supported Lipid Bilayer for Molecular Manipulation
NTT Technical Review 14(8), 1-5 (2016)

(8) M. Hattori, H. Ikenoue, D. Nakamura, **K. Furukawa**, M. Takamura, H. Hibino, T. Okada
Direct growth of graphene on SiC(0001) by KrF-excimer-laser irradiation
Appl. Phys. Lett. 108, 093107 (2016).

(9) Y. Ueno, **K. Furukawa**, A. Tin, H. Hibino
On-chip FRET Graphene Oxide Aptasensor: Quantitative Evaluation of Enhanced Sensitivity by Aptamer with a Double-stranded DNA Spacer
Anal. Sci. 31, 875-879 (2015).

(10) R.-S. O, M. Takamura, **K. Furukawa**, M. Nagase, H. Hibino
Effects of UV light intensity on electrochemical wet etching of SiC for the fabrication of suspended graphene
Jpn. J. Appl. Phys. 54, 036502 (2015).

(11) Y. Ueno, **K. Furukawa**, K. Matsuo, S. Inoue, K. Hayashi, H. Hibino
On-chip graphene oxide aptasensor for multiple protein detection
Anal. Chim. Acta 866, 1-9 (2015).

(12) Y. Kashimura, K. Sumitomo, **K. Furukawa**
Electrostatic control of the dynamics of lipid bilayer self-spreading using a nanogap gate
Mater. Res. Express 1, 035404 (2014).

(13) S. Tanabe, **K. Furukawa**, H. Hibino
Etchant-free and damageless transfer of monolayer and bilayer graphene grown on SiC
Jpn. J. Appl. Phys. 53, 115101 (2014).

(14) M. Takamura, H. Okamoto, **K. Furukawa**, H. Yamaguchi, H. Hibino
Energy dissipation in edged and edgeless graphene mechanical resonators
J. Appl. Phys. 116, 064304 (2014).

(15) S. Wang, S. Suzuki, **K. Furukawa**, C. M. Orofeo, M. Takamura, H. Hibino
Selective charge doping of chemical vaopr deposition-grown graphene by interface modification
Appl. Phys. Lett. 103, 253116 (2013).

(16) Y. Ueno, **K. Furukawa**, K. Matsuo, S. Inoue, K. Hayashi, H. Hibino
Molecular design for enhanced sensitivity in FRET aptasensor built on graphene oxide surface
Chem. Commun. 49, 10346-10348 (2013).

(17) **K. Furukawa**, Y. Ueno
Biosensing on a Graphene Oxide Surface
NTT Technical Review 11(8), 1-5 (2013).

(18) **K. Furukawa**, Y. Ueno, E. Tamechika, H. Hibino
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J. Mat. Chem. B 1, 1119-1124 (2013).

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(20) Y. Kashimura, **K. Furukawa**, K. Torimitsu
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IEICE Transactions E96-C, 344-347 (2013).

(21) Y. Ueno, **K. Furukawa**, K. Hayashi, M. Takamura, H. Hibino, E. Tamechika
Graphene-modified Interdigitated Array Electrode: Fabrication, Characterization, and Electrochemical Immunoassay Application
Anal. Sci. 29, 55-60 (2013).

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Visualization of Single Membrane Protein Structure in Stretched Lipid Bilayer Suspended over Nanowells
Appl. Phys. Express 3, 027002 (2010).

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Elastic modulus of suspended purple membrane measured by atomic force microscopy
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