

Naoya SUZUKI

Position	Assistant Professor
Lab/Group	Laboratory of Cellular Signaling Biophysics (K Lab)
e-mail ※	suzuki {a}synapse.phys.nagoya-u.ac.jp

※replace {a} by @

Education and Degrees

March, 1984, *B.S.*, Department of Physics, School of Science, Nagoya University

March, 1986, *M.S.*, Department of Physics, Graduate School of Science,
Nagoya University

March, 1989, *D.S.*, Department of Physics, Graduate School of Science,
Nagoya University

Positions

April, 1990 – March, 1992, *JSPS Research Fellow*, Department of Physics,
School of Science, Keio University

April, 1992 – present, *Assistant Professor*, Department of Physics,
Graduate School of Science, Nagoya University

Research

Mechanisms of neurotransmitter release and its regulation at presynaptic terminals

[Nagoya University Faculty Profile Page \(link\)](#)

[Lab/Group Homepage \(link\)](#)

List of Publications

Selected Publications

1. Effects of intravesicular loading of a Ca^{2+} chelator and depolymerization of actin fibers on neurotransmitter release in frog motor nerve terminals
K. Narita, N. Suzuki, N. Himi, T. Murayama, T. Nakagawa, N. Okabe, E. Nakamura-

- Maruyama N. Hayashi, I. Sakamoto, O. Miyamoto, and K. Kuba, *Eur. J. Neurosci.* (2019 July) Vol. 50(1) pp.1700-1711 DOI: 10.1111/ejn.14353
2. Ca^{2+} dynamics at the frog motor nerve terminal
S. Suzuki, M. Osanai, M. Murase, N. Suzuki, K. Ito, T. Shirasaki, K. Narita, K. Ohnuma, K. Kuba, and H. Kijima, *Pflügers Arch. – Eur. J. Physiol.* (2000) Vol. 440 pp.351-365
 3. Facilitation of neurotransmitter release at the spiny lobster neuromuscular junction
S. Ogawa, T. Takeuchi, K. Ohnuma, N. Suzuki, A. Miwa, N. Kawai, and H. Kijima, *Neuroscience Research* (2000) Vol. 37 pp.33-48
 4. Cooperative Ca^{2+} removal from presynaptic terminals of the spiny lobster neuromuscular junction
K. Ohnuma, T. Kazawa, S. Ogawa, N. Suzuki, A. Miwa, and H. Kijima, *Biophysical. J.* (1999) Vol. 76 pp.1819-1834
 5. Preparation of bead-tailed actin filaments: Estimation of the torque produced by the sliding force in an in vitro motility assay
N. Suzuki, H. Miyata, S. Ishiwata, and K. Kinoshita Jr., *Biophys. J.* (1996) Vol. 70 pp.401-408
 6. Compressibility and specific volume of actin decrease upon G to F transformation
N. Suzuki, Y. Tamura, and K. Mihashi, *Biochim. Biophys. Acta.* (1996) Vol.1292 pp.265-272
 7. Mechanical measurements of single actomyosin motor force
H. Miyata, H. Yoshikawa, H. Hakoziaki, N. Suzuki, T. Furuno, A. Ikegami, K. Kinoshita Jr., T. Nishizaka, and S. Ishiwata, *Biophys. J.* (1995) Vol.68 pp.286s-290s
 8. Stepwise motion of an actin filament over a small number of heavy meromyosin molecules is revealed in an in vitro motility assay
H. Miyata, H. Hakoziaki, H. Yoshikawa, N. Suzuki, K. Kinoshita Jr., T. Nishizaka, and S. Ishiwata, *J. Biochem.* (1994) Vol. 115 pp.644-647
 9. Adiabatic compressibility of myosin subfragment-1 and heavy meromyosin with or without nucleotide
Y. Tamura, N. Suzuki, and K. Mihashi, *Biophys. J.* (1993) Vol.65 pp.1899-1905
 10. Ca^{2+} -dependent regulation of the dynamic polarity of F-actin under the influence of tropomyosin and troponin
K. Mihashi, N. Suzuki and A. Ooi, *Biophys. Chem.* (1989) Vol.33 pp.195-204
 11. Subunit flow in F-actin under steady-state conditions: Application of a novel method to determination of the rate of subunit exchange of F-actin at the terminals
N. Suzuki and K. Mihashi, *Biophys. Chem.* (1989) Vol.33 pp.177-193