

## Publication List

- (1) Covalent self-labeling of tagged proteins with chemical fluorescent dyes in BY-2 cells and Arabidopsis seedlings  
R. J. Iwatake, A. Yoshinari, N. Yagi, M. Grzybowski, H. Ogasawara, M. Kamiya, T. Komatsu, M. Taki, S. Yamaguchi, W. B. Frommer, M. Nakamura  
*The Plant Cell*, **2020**, 32, 3081–3094.
- (2) Phosphole-oxide-based Fluorescent Probe for Super-resolution Stimulated Emission Depletion (STED) Live Imaging of the Lysosome Membrane  
C. Wang, M. Taki,\* K. Kajiwara, J. Wang, S. Yamaguchi\*  
*ACS Mater. Lett.*, **2020**, 2, 705–711.
- (3) Effects of Amino Group Substitution on the Photophysical Properties and Stability of Near-Infrared Fluorescent P-Rhodamines  
M. Grzybowski, M. Taki,\* K. Kajiwara, S. Yamaguchi\*  
*Chem. Eur. J.*, **2020**, 27, 7912–7917. **Selected as “Hot Paper”**
- (4) A photostable fluorescent marker for the super-resolution live imaging of the dynamic structure of the mitochondrial cristae  
C. Wang, M. Taki,\* Y. Sato, Y. Tamura, H. Yaginuma, Y. Okada, S. Yamaguchi\*  
*Proc. Natl. Acad. Sci. USA*, **2019**, 116, 15817–15822. **Highlighted in “In This Issue”**
- (5) The Effect of Branching on the One - and Two - Photon Absorption, Cell Viability, and Localization of Cationic Triarylborane Chromophores with Dipolar versus Octupolar Charge Distributions for Cellular Imaging  
S. Griesbeck, E. Michail, F. Rauch, H. Ogasawara, C. Wang, Y. Sato, R. M. Edkins, Z. Zhang, M. Taki, C. Lambert,\* S. Yamaguchi,\* T. B. Marder\*  
*Chem. Eur. J.*, **2019**, 25, 13164–13175.
- (6) Tuning the  $\pi$ -Bridge of Quadrupolar Triarylborane Chromophores for One- and Two-Photon Excited Fluorescence Imaging of Lysosomes in Live Cells  
S. Griesbeck, M. Evripidis, C. Wang, H. Ogasawara, S. Lorenzen, L. Gerstner, T. Zang, J. Nitsch, Y. Sato, R. Bertermann, M. Taki, C. Lambert,\* S. Yamaguchi,\* T. B. Marder\*  
*Chem. Sci.*, **2019**, 10, 5405–5422.
- (7) Optimization of Aqueous Stability vs.  $\pi$ -Conjugation in Tetracationic Bis(triarylborane) Chromophores: Applications in Live-Cell Fluorescence Imaging  
S. Griesbeck, M. Ferger, C. Czernetzki, C. Wang, R. Bertermann, A. Friedrich, M. Haehnel, D. Sieh, M. Taki, S. Yamaguchi,\* T. B. Marder\*  
*Chem. Eur. J.*, **2019**, 25, 7679–7688.
- (8) A Highly Photostable Near-Infrared Labeling Agent Based on a Phospha-rhodamine for Long-Term and Deep Imaging  
M. Grzybowski, M. Taki,\* K. Senda, Y. Sato, T. Ariyoshi, Y. Okada, R. Kawakami, T. Imamura, S. Yamaguchi\*  
*Angew. Chem. Int. Ed.*, **2018**, 57, 10137–10141.
- (9) A far-red fluorescent probe based on a phospha-fluorescein scaffold for cytosolic calcium imaging  
H. Ogasawara, M. Grzybowski, R. Hosokawa, Y. Sato, M. Taki,\* S. Yamaguchi\*  
*Chem. Commun.*, **2018**, 54, 299–302.
- (10) Super-Photostable Phosphole-Based Dye for Multiple-Acquisition Stimulated Emission Depletion Imaging  
C. Wang, M. Taki,\* Y. Sato,\* A. Fukazawa,\* T. Higashiyama, S. Yamaguchi\*  
*J. Am. Chem. Soc.*, **2017**, 139, 10374–10381.
- (11) Color-tunable fluorescent nanoparticles encapsulating trialkylsilyl-substituted pyrene liquids  
M. Taki,\* S. Azeyanagi, K. Hayashi, S. Yamaguchi\*  
*J. Mater. Chem. C*, **2017**, 5, 2142–2148.
- (12) Selective Conversion of P=O-Bridged Rhodamines into P=O-Rhodols: Solvatochromic Near-Infrared Fluorophores  
M. Grzybowski, M. Taki,\* S. Yamaguchi\*  
*Chem. Eur. J.*, **2017**, 23, 13028–13032.

- (13) Water-Soluble N-Heterocyclic Carbene-Protected Gold Nanoparticles: Size-Controlled Synthesis, Stability, and Optical Properties  
K. Salorinne, R. W. Y. Man, C-H. Li, M. Taki, M. Nambo, C. M. Crudden\*  
*Angew. Chem. Int. Ed.*, **2017**, *56*, 6198–6202.
- (14) A Macroyclic Fluorophore Dimer with Flexible Linkers: Bright Excimer Emission with Long Fluorescence Lifetime  
H. Osaki, C-M. Chou, M. Taki,\* K. Welke, D. Yokogawa, S. Irle,\* Y. Sato, T. Higashiyama, S. Saito, A. Fukazawa, S. Yamaguchi\*  
*Angew. Chem. Int. Ed.*, **2016**, *55*, 7131–7135. **Selected as “Hot Paper”**
- (15) Phospha-fluorescein: a red-emissive fluorescein analogue with high photobleaching resistance  
A. Fukazawa,\* S. Suda, M. Taki,\* E. Yamaguchi, M. Grzybowski, Y. Sato, T. Higashiyama, S. Yamaguchi\*  
*Chem. Commun.*, **2016**, *52*, 1120–1123. **Selected as “Cover Picture”**
- (16) A Phosphole Oxide Based Fluorescent Dye with Exceptional Resistance to Photobleaching: A Practical Tool for Continuous Imaging in STED Microscopy  
C. Wang, A. Fukazawa,\* M. Taki,\* Y. Sato, T. Higashiyama,\* S. Yamaguchi\*  
*Angew. Chem. Int. Ed.*, **2015**, *54*, 15213–1521.
- (17) A Red-emitting Ratiometric Fluorescent Probe Based on a Benzophosphole P-Oxide Scaffold for the Detection of Intracellular Sodium Ions  
M. Taki,\* H. Ogasawara, H. Osaki, A. Fukazawa, Y. Sato, K. Ogasawara, T. Higashiyama, S. Yamaguchi\*  
*Chem. Commun.*, **2015**, *51*, 11880–11883.
- (18) Environment-Sensitive Fluorescent Probe: A Benzophosphole Oxide with an Electron-Donating Substituent  
E. Yamaguchi, C. Wang, A. Fukazawa,\* M. Taki, Y. Sato, T. Sasaki, M. Ueda, N. Sasaki, T. Higashiyama, S. Yamaguchi\*  
*Angew. Chem. Int. Ed.*, **2015**, *54*, 4539–4543.
- (19) A mitochondria-targeted turn-on fluorescent probe based on a rhodol platform for the detection of copper(I)  
M. Taki,\* K. Akaoka, K. Mitsui, Y. Yamamoto  
*Org. Biomol. Chem.*, **2014**, *12*, 4999–5005.
- (20) Asymmetrical Distribution of Choline Phospholipids Revealed by Click Chemistry and Freeze-Fracture Electron Microscopy  
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M. Taki,\* K. Akaoka, S. Iyoshi, Y. Yamamoto  
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- (22) Development of a Dual Functional Luminescent Sensor for Zinc Ion Based on a Peptidic Architecture  
T. Hirayama, M. Taki,\* K. Akaoka, Y. Yamamoto  
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- (23) Structural Insights into the Substrate Specificity of Bacterial Copper Amine Oxidase Obtained by Using Irreversible Inhibitors  
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S. Iyoshi, M. Taki,\* Y. Yamamoto  
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- (25) Design and Synthesis of Fluorescent Probe for Polyhistidine Tag Using Macroyclic Nickel(II) Complex and Fluorescein Conjugate  
M. Taki,\* F. Asahi, T. Hirayama, Y. Yamamoto  
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- (26) Visualization of the Binding Site of Actin Binding Protein on the Actin Filament by Using a Gold Nanocluster and an Image Analysis  
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M. Taki,\* M. Desaki, A. Ojida, S. Iyoshi, T. Hirayama, I. Hamachi, Y. Yamamoto  
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T. Hirayama, M. Taki,\* Y. Kashiwagi, M. Nakamoto, A. Kunishita, S. Itoh, Y. Yamamoto  
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- (37) Synthesis of A New Water Soluble 2,2-Bifunctionalized Spin Label and Its Application to Troponin C  
T. Hirayama, M. Taki, M. Nakamura, T. Arata, Y. Yamamoto\*  
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Y-C. Chiu, T. Okajima,\* T. Murakawa, M. Uchida, M. Taki, S. Hirota, M. Kim, H. Yamaguchi, Y. Kawano, N. Kamiya, S. Kuroda, H. Hayashi, Y. Yamamoto, K. Tanizawa\*  
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