SRfluor® Publications

Cole EL, Arunkumar E, Xiao S, Smith BA, Smith BD. 2012. Water-soluble, deepred fluorescent squaraine rotaxanes. Org. Biomol. Chem. 10(30):5769-5773.

Collins CG, Baumes JM, Smith BD. 2011. Thermally-activated chemiluminescent squaraine rotaxane endoperoxide with green emission. Chem. Commun. (Camb). 47(45):12352-4.

Murgu I, Baumes JM, Eberhard J, Gassensmith JJ, Arunkumar E, Smith BD. 2011. Macrocycle breathing in [2]rotaxanes with tetralactam macrocycles. J Org Chem. 76(2): 688-691.

Baumes JM, Gassensmith JJ, Giblin J, Lee JJ, White AG, Culligan WJ, Leevy WM, Kuno M, Smith BD. 2010. Storable, thermally activated, near-infrared chemiluminescent dyes and dye-stained microparticles for optical imaging. Nat Chem. 2(12):1025-1030.

Baumes JM, Murgu I, Oliver A, Smith BD. 2010. Using the rotaxane mechanical bond to enhance chemical reactivity. Org Lett. 12(21):4980-4983.

Fu N, Gassensmith JJ, Smith BD. 2010. New Class of Hydroxy-Substituted Squaraine Rotaxane. Aust J Chem. 63(5):792-796.

Xue M, Su YS, Chen CF. 2010. Isomeric squaraine-based [2]pseudorotaxanes and [2]rotaxanes: synthesis, optical properties, and their tubular structures in the solid state. Chemistry 16(28):8537-44.

White AG, Fu N, Leevy WM, Lee JJ, Blasco MA, Smith BD. 2010. Optical imaging of bacterial infection in living mice using deep-red fluorescent squaraine rotaxane probes. Biocon. Chem. 21(7):1297-304.

Zhang G, Xiao L, Zhang F, Wang X, Jia S. 2010. Single molecules reorientation reveals the dynamics of polymer glasses surface. Phys. Chem. Phys.,12 (10): 2308-2312.

Hsueh SY, Lai CC, Chiu SH. 2010. Squaraine-based [2]rotaxanes that function as visibly active molecular switches. Chemistry 16 (10) :2997-3000.

Lee JJ, White AG, Baumes JM, Smith BD. 2010. Microwave-assisted slipping synthesis of fluorescent squaraine rotaxane probe for bacterial imaging. Chem Commun (Camb). 46 (7):1068-1069.

Gassensmith JJ, Matthys S, Lee JJ, Wojcik A, Kamat PV, Smith BD. 2010. Squaraine rotaxane as a reversible optical chloride sensor. Chemistry 16(9):2916-2921.

Xiao S, Fu N, Peckham K, Smith BD. 2010. Efficient synthesis of fluorescent squaraine rotaxane dendrimers. Org Lett. 12 (1):140-143.

Gassensmith JJ, Baumes JM, Smith BD. 2009. Discovery and early development of squaraine rotaxanes. Chem Commun (Camb). 42: 6329-6338. Version 1: Oct 2012

Fu N, Baumes JM, Arunkumar E, Noll BC, Smith BD. 2009. Squaraine rotaxanes with boat conformation macrocycles. J Org Chem. 74 (17): 6462-6468.

Fu N, Gassensmith JJ, Smith BD. 2009. Effect of Stopper Size on Squaraine Rotaxane Stability. Supramol. Chem., 21(1-2):118-124

Gassensmith JJ, Barr L, Baumes JM, Paek A, Nguyen A, Smith BD. 2008. Synthesis and photophysical investigation of squaraine rotaxanes by "clicked capping" Org Lett. 10 (15): 3343-3346.

Hsueh SY, Lai CC, Liu YH, Wang Y, Peng SM, Chiu SH. 2007. Protecting a squaraine near-IR dye through its incorporation in a slippage-derived [2]rotaxane. Org Lett. 9 (22): 4523-4526.

Johnson JR, Fu N, Arunkumar E, Leevy WM, Gammon ST, Piwnica-Worms D, Smith BD. 2007. Squaraine rotaxanes: superior substitutes for Cy-5 in molecular probes for near-infrared fluorescence cell imaging. Ang. Chem. Int. Ed. Engl. 46 (29):5528-5531.

Hsueh SY, Lai CC, Liu YH, Peng SM, Chiu SH. 2007. Highly selective Na(+)- templated formation of [2]pseudorotaxanes exhibiting significant optical outputs. Ang. Chem. Int. Ed. Engl. 46(12):2013-7.

Tsukui, Takayuki, et al. "Novel fluorescence-based method to characterize the antioxidative effects of food metabolites on lipid droplets in cultured hepatocytes." *Journal of agricultural and food chemistry* 67.35 (2019): 9934-9941.

B. Gowda, Siddabasave Gowda, et al. "docosahexaenoic acid esters of hydroxy fatty acid is a novel activator of NRF2." *International Journal of Molecular Sciences* 22.14 (2021): 7598.

B. Gowda, Siddabasave Gowda, et al. "Discovery of eicosapentaenoic acid esters of hydroxy fatty acids as potent Nrf2 activators." *Antioxidants* 9.5 (2020): 397.

Cui, Mengchao, et al. "Smart near-infrared fluorescence probes with donor–acceptor structure for in vivo detection of β-amyloid deposits." *Journal of the American Chemical Society* 136.9 (2014): 3388-3394.

Li, Hengde, et al. "Functional bioprobe for responsive imaging and inhibition of amyloid-β oligomer based on curcuminoid scaffold." *Journal of Luminescence* 238 (2021): 118218.

Sazaki, Iku, et al. "Oxidized Low-Density Lipoproteins Trigger Hepatocellular Oxidative Stress with the Formation of Cholesteryl Ester Hydroperoxide-Enriched Lipid Droplets." *International Journal of Molecular Sciences* 24.5 (2023): 4281.

Ogata, Fusa, et al. "Activatable near-infrared fluorescence imaging using PEGylated bacteriochlorin-based chlorin and BODIPY-dyads as probes for detecting cancer." *Bioconjugate chemistry* 30.1 (2018): 169-183.

Tong, Hongjuan, Kaiyan Lou, and Wei Wang. "Near-infrared fluorescent probes for imaging of amyloid plaques in Alzheimer′ s disease." *Acta pharmaceutica sinica B* 5.1 (2015): 25-33.

Chen, Ruiyun, et al. "Signal-to-Background Ratio Improvement for Single-Molecule Spectroscopy Using Tube Lens to Reduce the Effective Detection Region." *Journal of the Physical Society of Japan* 81.8 (2012): 084005.

Lampkowski, Jessica S., et al. "Development and optimization of Glaser–Hay bioconjugations." *Angewandte Chemie International Edition* 54.32 (2015): 9343-9346.

Lynch, Daniel E., and Darren G. Hamilton. "The history of azulenyl squaraines." *Australian Journal of Chemistry* 70.8 (2017): 857-871.

Wang, Tieyun, et al. "Single Molecule Dynamics Measurement by Using Fluorescence Correlation Spectroscopy." (2012).

Kim, Donggyu, et al. "Pixelation-free and real-time endoscopic imaging through a fiber bundle." *arXiv preprint arXiv:1308.6719* (2013).

Kim, Donggyu, et al. "Toward a miniature endomicroscope: pixelation-free and diffraction-limited imaging through a fiber bundle." *Optics letters* 39.7 (2014): 1921-1924.

Khalily, Melek P., and Medine Soydan. "Peptide-based diagnostic and therapeutic agents: Where we are and where we are heading?." *Chemical Biology & Drug Design* 101.3 (2023): 772-793.

Guo, Yixiao, et al. "Multiscale imaging of brown adipose tissue in living mice/rats with fluorescent polymer dots." *ACS applied materials & interfaces* 10.24 (2018): 20884-20896.

Kim, Moonseok, et al. "Transmission matrix of a scattering medium and its applications in biophotonics." *Optics express* 23.10 (2015): 12648-12668.

Cui, Mengchao. "Past and recent progress of molecular imaging probes for β-amyloid plaques in the brain." *Current Medicinal Chemistry* 21.1 (2014): 82-112.

Liu, Wenqi. *Molecular Recognition Using Tetralactam Macrocycle and Development of Synthavidin Technology*. University of Notre Dame, 2018.

Rai, Himanshu, et al. "Near-infrared fluorescent probes as imaging and theranostic modalities for amyloid-beta and tau aggregates in Alzheimer's disease." *Journal of Medicinal Chemistry* 65.13 (2022): 8550-8595.