

Publications on STED Microscopy

Publications based on the Leica TCS STED:

SNARE function is not involved in early endosome docking.

Geumann U, Barysch SV, Hoopmann P, Jahn R, Rizzoli SO.
Mol Biol Cell. 2008 Dec;19(12):5327-37.

Defective Ca²⁺ channel clustering in axon terminals disturbs excitability in motoneurons in spinal muscular atrophy.

Jablonka S, Beck M, Lechner BD, Mayer C, Sendtner M.
J Cell Biol. 2007 Oct 8;179(1):139-49.

In vivo labeling method using a genetic construct for nanoscale resolution microscopy.

Schröder J, Benink H, Dyba M, Los GV.
Biophys J. 2009 Jan;96(1):L1-3.

several in submission

selected biologically relevant STED publications:

Video-rate far-field optical nanoscopy dissects synaptic vesicle movement.

Westphal V, Rizzoli SO, Lauterbach MA, Kamin D, Jahn R, Hell SW.
Science. 2008 Apr 11;320(5873):246-9.

Bruchpilot promotes active zone assembly, Ca²⁺ channel clustering, and vesicle release.

Kittel RJ, Wichmann C, Rasse TM, Fouquet W, Schmidt M, Schmid A, Wagh DA, Pawlu C, Kellner RR, Willig KI, Hell SW, Buchner E, Heckmann M, Sigrist SJ.
Science. 2006 May 19;312(5776):1051-4.

Anatomy and dynamics of a supramolecular membrane protein cluster.

Sieber JJ, Willig KI, Kutzner C, Gerding-Reimers C, Harke B, Donnert G, Rammner B, Eggeling C, Hell SW, Grubmüller H, Lang T.
Science. 2007 Aug 24;317(5841):1072-6.

Nanoscale organization of nicotinic acetylcholine receptors revealed by stimulated emission depletion microscopy.

Kellner RR, Baier CJ, Willig KI, Hell SW, Barrantes FJ.
Neuroscience. 2007 Jan 5;144(1):135-43.

STED microscopy reveals that synaptotagmin remains clustered after synaptic vesicle exocytosis.

Willig KI, Rizzoli SO, Westphal V, Jahn R, Hell SW.
Nature. 2006 Apr 13;440(7086):935-9.