

Partial Publications List using PicoStar Intensifier based Camera Detection

2017

Characterisation of new gated optical image intensifiers for fluorescence lifetime imaging
H. Sparks, F. Görlitz, D. J. Kelly, S. C. Warren, P. A. Kellett, E. Garcia, A. K. L. Dymoke-Bradshaw, J. D. Hares, M. A. A. Neil, C. Dunsby, and P. M. W. French
Review of Scientific Instruments 2017, 88:1 DOI:<http://dx.doi.org/10.1063/1.4973917>

Open Source High Content Analysis Utilizing Automated Fluorescence Lifetime Imaging Microscopy.
Frederik Görlitz, Douglas J. Kelly, Sean C. Warren, Dominic Alibhai, Lucien West, Sunil Kumar, Yuriy Alexandrov, Ian Munro, Edwin Garcia, James McGinty, Clifford Talbot, Remigiusz A. Serwa, Emmanuelle Thinon, Vincenzo da Paola, Edward J. Murray, Frank Stuhmeier, Mark A. A. Neil, Edward W. Tate, Christopher Dunsby, Paul M. W. French
J. Vis. Exp. (119), e55119, doi:10.3791/55119 (2017)

Multiplexing PKA and ERK1&2 kinases FRET biosensors in living cells using single excitation wavelength dual colour FLIM
Claire Demeautis, François Sipieter, Julien Roul, Catherine Chapuis, Sergi Padilla-Parr, Franck B. Riquet, Marc Tramier
Scientific Reports, 7, 41026 (2017)

2016

Iterative creation and sensing of twisted light
Brannon B. Klopfer, Thomas Juffmann, and Mark A. Kasevich
Opt. Lett. 41, 5744-5747 (2016)

Photo-electron streaking for synchronization of laser pulses with radiofrequency fields
Thomas Juffmann, Brannon B Klopfer, and Mark A. Kasevich
Frontiers in Optics 2016, OSA Technical Digest (online)
Optical Society of America, (2016), paper FF5C.5.

Pulsed positive discharges in air at moderate pressures near a dielectric rod
A Dubinova, D Trienekens, U Ebert, S Nijdam and T Christen
Plasma Sources Science and Technology, 2016, 25, 055021

Modeling of streamer discharges near dielectrics
Dubinova, Anna
Doctoral dissertation, Technische Universiteit Eindhoven, 2016

Efficient Radiative Pumping of Polaritons in a Strongly Coupled Microcavity by a Fluorescent Molecular Dye.
Grant, R. T., Michetti, P., Musser, A. J., Gregoire, P., Virgili, T., Vella, E., Cavazzini, M., Georgiou, K., Galeotti, F., Clark, C., Clark, J., Silva, C. and Lidzey, D. G.
Advanced Optical Materials (2016) doi:10.1002/adom.20160033

Screening for protein-protein interactions using Förster resonance energy transfer (FRET) and fluorescence lifetime imaging microscopy (FLIM)
Anca Margineanu, Jia Jia Chan, Douglas J. Kelly, Sean C. Warren, Delphine Flatters, Sunil Kumar, Matilda Katan, Christopher W. Dunsby & Paul M. W. French
Scientific Reports 6, Article number: 28186 (2016)

Hexapole-Oriented Asymmetric-Top Molecules and Their Stereodirectional Photodissociation Dynamics
Masaaki Nakamura, Shiun-Jr. Yang, Po-Yu Tsai, Toshio Kasai, King-Chuen Lin, Dock-Chil Che, Andrea Lombardi, Federico Palazzetti, and Vincenzo Aquilanti
The Journal of Physical Chemistry A 2016, 120(27), 5389-98

Fluorescence lifetime optical projection tomography and FRET applied to visualizing apoptosis in live zebrafish larvae
N. Andrews, M. Ramel, S. Kumar, Y. Alexandrov, D. Kelly, S. Warren, L. Kerry, N. Lockwood, A. Frolov, P. Frankel, L. Bugeon, J. A. McGinty, M. J. Dallman, and P. M. French
Biomedical Optics 2016, OSA Technical Digest (online) (Optical Society of America, 2016), paper OTu2C.4.

Time-gated FLIM microscope for corneal metabolic imaging

Susann F. Silva, Anna Batista, Jose Paulo Domingues, Maria Joao Quadrado, Antonio Miguel Morgado
Proc. SPIE 9712, Multiphoton Microscopy in the Biomedical Sciences XVI, 97122C (March 14, 2016)

Substrate-based near-infrared imaging sensors enable fluorescence lifetime contrast via built-in dynamic fluorescence quenching elements.

Kumar, A. T., Rice, W. L., Lopez, J. C., Gupta, S., Goergen, C. J., & Bogdanov, A. A.
ACS Sensors 2016, 1(4), 427-436

Gate-width impact on NIR FRET lifetime fitting using gated ICCD.

Chen, Sez-Jade, and Xavier Intes
SPIE BiOS. International Society for Optics and Photonics, 2016

Can 3D light localization be reached in ‘white paint’?.

Sperling, T., Schertel, L., Ackermann, M., Aubry, G. J., Aegegerter, C. M., & Maret, G.
New Journal of Physics, 2016, 18(1), 013039.

Drilling with Ultrashort Laser Pulses at High Repetition Rates.

Dreisow, F., Döring, S., Ancona, A., König, J., & Nolte, S.
In *Ultrashort Pulse Laser Technology, 2016*, pp. 175-200, Springer International Publishing

Escherichia coli as a model active colloid: A practical introduction.

Schwarz-Linek, J., Arlt, J., Jepson, A., Dawson, A., Vissers, T., Miroli, D., ... & Poon, W. C.
Colloids and Surfaces B: Biointerfaces, 2016, 137, 2-16.

Visualising apoptosis in live zebrafish using fluorescence lifetime imaging with optical projection tomography to map FRET biosensor activity in space and time

Andrews, N., Ramel, M.-C., Kumar, S., Alexandrov, Y., Kelly, D. J., Warren, S. C., Kerry, L., Lockwood, N., Frolov, A., Frankel, P., Bugeon, L., McGinty, J., Dallman, M. J. and French, P. M. W.
J. Biophotonics, 2016, pp1-11 doi: 10.1002/jbio.201500258

From an electron avalanche to the lightning discharge

B. Zh. Zalikhanov
Physics of Particles and Nuclei, 2016, 47(1), pp 108-133

Dynamic optical tomographic imaging devices methods and systems

Andreas H. Hielscher, Michael Khalil, Rajeev Dayal, In-Kyong Kim, Hyun Keol Kim
US 9492089 B2, 15. Nov. 2016

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Emission characteristics of femtosecond laser-induced plasmas in air
Ilyin AA, Golik SS, SHMIRKO KA
Bulletin of the Far Eastern Branch of the Russian Academy of Sciences 2015, 3 (181)

Observation of image pair creation and annihilation from superluminal scattering sources

Matteo Clerici, Gabriel C. Spalding, Ryan E. Warburton, Ashley Lyons, Constantin Aniculaesei, Joseph M. Richards, Jonathan Leach, Robert Henderson, Daniele Faccio
arXiv:1512.02622 [astro-ph.IM]

Stability and excitation dynamics of an argon micro-scaled atmospheric pressure plasma jet

M Dünnbier, M M Becker, S Iseni, R Bansemmer, D Loffhagen, S Reuter, and K-D Weltmann
Plasma Sources Science and Technology, 2015, 24(6), 065018

Absorption of laser radiation by femtosecond laser-induced plasma of air and its emission characteristics

A. A. Ilyin, S. S. Golik and K. A. Shmirk
Proc. SPIE 9680, 21st International Symposium Atmospheric and Ocean Optics: Atmospheric Physics, 96801Y
(November 19, 2015);

Ultrahigh exciton diffusion in intrinsic diamond

Hikaru Morimoto, Yuji Hazama, Koichiro Tanaka, and Nobuko Naka

Phys. Rev. B 92, 201202(R), 2015

Can 3D light localization be reached in white paint?

Tilo Sperling, Lukas Schertel, Mirco Ackermann, Georoy J. Aubry, Christof M. Aegerter, and Georg Maret
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Pescini, E.; Franciosi, L.; De Giorgi, M.G.; Ficarella, A.

Plasma Science, IEEE Transactions on , 2015, vol.PP, no.99, pp.1-1

The Experimental Search for Anderson Localisation of Light in Three Dimensions

Tilo Sperling

PhD Thesis, Faculty of Physics, University of Konstanz, July 2015

Localized pulsed nanosecond discharges in a counterflow nonpremixed flame environment

C Guerra-Garcia, M Martinez-Sanchez, R B Miles and A Starikovskiy

Plasma Sources Science and Technology, 2015, 24(5), 055010

Propagation mechanisms of guided streamers in plasma jets: the influence of electronegativity of the surrounding gas

Ansgar Schmidt-Bleker, Seth A Norberg, Jörn Winter, Eric Johnsen, S Reuter, K D Weltmann and Mark J Kushner

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Plasma Sources Sci. Technol., 2015, 24(4), 045014

Stroboscopic investigation of domain wall motion at high frequencies

Magni , Alessandro

International Journal of Applied Electromagnetics and Mechanics, 48(2-3) pp. 295-300, 2015

Absorption and Emission Characteristics of Femtosecond Laser Plasma Filaments in the Air

Alexey A. Ilyin, Sergey S. Golik, Konstantin A. Shmirko

Spectrochimica Acta Part B: Atomic Spectroscopy, 2015

Experimental investigation of streamer affinity for dielectric surfaces

D.J.M. Trienekens, S. Nijdam, G. Akkermans, I. Plomp, T. Christen, U. Ebert

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Raman Spectroscopic Techniques for Planetary Exploration: Detecting Microorganisms through Minerals

Verkaaij Mattheus F.C., Hooijssuur Jan-Hein, Davies Gareth R., and Ariese Freek

Astrobiology, 2015, doi:10.1089/ast.2015.1329.

Excitation Wavelength Dependence of the Solvation Dynamics of 4'-N,N-Diethylamino-3-methoxyflavon in Ionic Liquids

Yoshifumi Kimura, Kayo Suda, Mako Shibuya, Yoshiro Yasaka, Masakatsu Ueno

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Development of a time-gated fluorescence lifetime microscope for in vivo corneal metabolic imaging

Susana F. Silva, Ana Batista, Olga C. Castejón, Maria João Quadrado, José Paulo Domingues, Miguel Morgado

Proc. SPIE 9537, Clinical and Biomedical Spectroscopy and Imaging IV, 953709 (July 15, 2015)

3D imaging of apoptosis by FRET, light sheet fluorescence and scattering microscopy

Herbert Schneckenburger, Petra Weber, Sarah Schickinger, Verena Richter, Thomas Bruns, Michael Wagner

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Fast gas heating in N₂/O₂ mixtures under nanosecond surface dielectric barrier discharge: the effects of gas pressure and composition

M. M Nudnova, S. V Kindysheva, N. L Aleksandrov, A. Yu Starikovskii

Phil. Trans. R. Soc. A, 2015, 373, 20140330

Homo-FRET Based Biosensors and Their Application to Multiplexed Imaging of Signalling Events in Live Cells
Sean C. Warren, Anca Margineanu, Matilda Katan, Chris Dunsby and Paul M. W. French
Int. J. Mol. Sci. 2015, 16, 14695-14716

Escherichia coli as a model active colloid: a practical introduction
Jana Schwarz-Linek, Jochen Arlt, Alys Jepson, Angela Dawson, Teun Vissers, Dario Miroli,
Teuta Pilizotay, Vincent A. Martinez and Wilson C. K. Poon
Colloids and Surfaces, 2015

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Douglas J. Kelly, Sean C. Warren, Dominic Alibhai, Sunil Kumar, Yuriy Alexandrov, Ian Munro, Anca Margineanu, Jessica McCormack, Natalie J. Welsh, Remigiusz A. Serwa, Emmanuelle Thinon, Mesayamas Kongsema, James McGinty, Clifford Talbot, Edward J. Murray, Frank Stuhmeier, Mark A. A. Neil, Edward W. Tate, Vania M. M. Braga, Eric W.-F. Lam, Christopher Dunsbyah and Paul M. W. French
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Silva, Susana F; Batista, Ana; Domingues, Jose Paulo; Quadrado, Maria Joao; Morgado, Miguel
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SA Pikuz, TA Shelkovenko, DA Hammer - Plasma Physics Reports, 2015
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X-pinches. Part I
S. A. Pikuz, T. A. Shelkovenko, D. A. Hammer
Plasma Physics Reports, 2015, 41(4), pp 291-342

Ultrafast imaging of terahertz Cherenkov waves and transition-like radiation in LiNbO₃
Zhenyou Wang, FuHai Su, and Frank A. Hegmann
OPTICS EXPRESS 2015, 23(6), 8073-8086

Ultrasound-modulated fluorescence based on donor-acceptor-labeled microbubbles
Yuan Liu ; Jameel A. Feshitan ; Ming-Yuan Wei ; Mark A. Borden and Baohong Yuan
J. Biomed. Opt. 20(3), 036012 (Mar 19, 2015).

Monitoring of Apoptosis in 3D Cell Cultures by FRET and Light Sheet Fluorescence Microscopy Weber, P., Schickinger, S., Wagner, M., Angres, B., Bruns, T., & Schneckenburger, H.
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Tissue phantoms to compare spatial and temporal offset modes of deep Raman spectroscopy Petterson, I. E. I., Esmonde-White, F. W., de Wilde, W., Morris, M., & Ariese, F.
Analyst, 2015

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Kevin Garello, Can Onur Avci, Ioan Mihai Miron, Manuel Baumgartner, Abhijit Ghosh, Stéphane Auffret, Olivier Boule, Gilles Gaudin, Pietro Gambardella
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Benoît Rogez, Heejun Yang, Eric Le Moal, Sandrine Lévéque-Fort, Elizabeth Boer-Duchemin, Fei Yao, Young-Hee Lee, Yang Zhang, K. David Wegner, Niko Hildebrandt, Andrew Mayne, and Gérald Dujardin
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A flexible wide-field FLIM endoscope utilising blue excitation light for label-free contrast of tissue
Sparks, H., Warren, S., Guedes, J., Yoshida, N., Charn, T. C., Guerra, N., Tatla, T., Dunsby, C. and French, P.
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Nijdam S., Trienekens, D. J. M., Takahashi, E., Ebert, U.
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Trienekens, D. J., S. Nijdam, Ebert, U.
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L. Zhao, S. Rajoria, M. Barroso, and X. Intes
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Yanlong Yu, Yue Tang, Jixiang Yuan, Qiang Wu, Wenjun Zheng, and Yuan Cao
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Golgi sorting regulates organization and activity of GPI proteins at apical membranes
Simona Paladino, Stéphanie Lebreton, Simona Tivodar, Fabio Formiggini, Giulia Ossato, Enrico Gratton, Marc Tramier, Maité Coppey-Moisan, Chiara Zurzolo
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Lingling Zhao, Ken Abe, Shilpi Rajoria, Qi Pian, Margarida Barroso, and Xavier Intes,
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Christopher Dunsby; Paul French; Yoshifumi Itoh
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A flexible wide-field FLIM endoscope utilising blue excitation light for label-free contrast of tissue
Sparks, H., Warren, S., Guedes, J., Yoshida, N., Charn, T. C., Guerra, N., Tatla, T., Dunsby, C. and French, P.
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Spatial light modulator based active wide-field illumination for ex vivo and in vivo quantitative NIR FRET imaging
Lingling Zhao, Ken Abe, Shilpi Rajoria, Qi Pian, Margarida Barroso, and Xavier Intes
Biomedical Optics Express, 2014, 5(3), pp. 944-960

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Sarah Schickinger; Thomas Bruns; Rainer Wittig; Petra Weber; Michael Wagner; Herbert **Schneckenburger**
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Non-Invasive In Vivo Imaging of Near Infrared-labeled Transferrin in Breast Cancer Cells and Tumors Using Fluorescence Lifetime FRET
Ken Abe, Lingling Zhao, Ammasi Periasamy, Xavier **Intes**, Margarida Barroso

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Excitation Wavelength Dependence of Excited State Intramolecular Proton Transfer Reaction of 4'-N,N-Diethylamino-3-hydroxyflavone in Room Temperature Ionic Liquids Studied by Optical Kerr Gate Fluorescence Measurement

Kayo Suda, Masahide **Terazima**, Hirofumi Sato, and Yoshifumi Kimura

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Yuan Liu and Baohong **Yuan**

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Somphonh Peter Phivilay, Alexander A. **Puretzky**, Kazunari Domen, and Israel Ephriam Wachs

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Jan-Hein Hooijsschuur, Ingeborg E. Iping Petterson, Gareth R. Davies, Cees **Gooijer**, Freek Ariese

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Rapid Global Fitting of Large Fluorescence Lifetime Imaging Microscopy Datasets

Sean C. Warren, Anca Margineanu, Dominic Alibhai, Douglas J. Kelly, Clifford Talbot, Yuriy Alexandrov,

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Nanosecond Electric Pulse Effects on Gene Expression

Louise Chopinet, Tina Batista-Napotnik, Audrey Montigny, Matej Rebersek, Justin Teissié, Marie-Pierre Rols, Damijan Miklavčič

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Enhanced Dynamic Range and Accuracy of Fluorescence Lifetime Imaging by Active Illumination

Zhao, Lingling ; Abe, Ken ; Barroso, Margarida ; **Intes**, Xavier

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A fast full-body fluorescence/bioluminescence imaging system for small animals

Jong Hwan Lee; Hyun Keol Kim; Jingfei Jia; Christopher Fong; Andreas H. **Hielscher**

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In Vivo Time-Resolved Fluorescence Imaging of a NIR FRET Probe in Live Mice

Zhao, Lingling ; Abe, Ken ; Barroso, Margarida ; **Intes**, Xavier

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Near infrared FRET using wide-field fluorescence lifetime imaging in live animals

Lingling Zhao ; Ken Abe ; Margarida Barroso ; Xavier **Intes**

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