Jonas Beermann Kristiansen
Mads Clausen Instituttet (MCI)
SDU Nano Optics
E-mail: job@mci.sdu.dk
Telefon: +4565507344

CV

Name: **Jonas Beermann**

Appointment: Associate Professor.

Place of work: Mads Clausen Institute (MCI), University of Southern Denmark, Campusvej 55, DK-5230 Odense M, Denmark.

Responsible for the lab facility on Nonlinear Scanning Optical Microscopy, Spectroscopy and Surface Enhanced Microscopy.

Tel: +45 65 50 73 44,
Fax: +45 65 50 73 84,

E-mail: job@mci.sdu.dk; web: www.sdu.dk/nano-optics

Foreign Languages: Fluent in English (spoken and written), German (spoken and written).

Education:
June 28th, 2001 - Cand. Scient. in Physics and Mathematics (Optics Engineer). M.Sc. project ”Nonlinear optical properties of porous silicon”. Institute of Physics, Aalborg University (AAU), Denmark.

May 3rd, 2006 - PhD Scient. for the thesis ”Nonlinear far- and near-field scanning optical microscopy of nanostructures”. Department of Physics and Nanotechnology, AAU, Denmark.

Appointments:
Aug. 2001 – Feb. 2005: PhD.-student at Department of Physics and Nanotechnology, AAU, “Nonlinear optical microscopy of nanostructures”.

Feb. 2002 – July 2002: Leave of absence, military service, 6 months.

Feb. 2005 – July 2006: Post doc. at Department of Physics and Nanotechnology, AAU, ”Field enhancement via multiple scattering of surface plasmon polaritons”. The European Network of Excellence (NoE), project Plasmo-Nano-Devices (FP6-2002-IST-1-507879).

Aug. 2006 – Jan 2008: Post doc. at Department of Physics and Nanotechnology, AAU, ”Plasmo-optical chip technology and spectroscopy”. The Strategic Research Council, program committee for Nanoscience and technology, Biotechnology and IT (NABIIT), (Contract no. 2106-05-033).

Feb. 2008 – Dec 2010: Assistant Professor at Institute of Sensors, Signals and Electrotechnics (SENSE), University of Southern Denmark (SDU).

Jan. 2011 – Oct. 2011: Assistant Professor at ITI, SDU.

Oct. 2011 – Dec. 2011: Paternity leave, 3 months.

Nov. 2011 – May 2013: Associate Professor at ITI, SDU.
May 2013 – Present: Associate Professor, Center for Nano Optics, MCI, SDU.

Programming: Matlab, Labview, Comsol, LaTeX, Origin, AutoCAD, C++ (Turbo Pascal).

Project Management and Supervision:

1996 – 2001: Engaged member in 8 full-semester group-projects and 2 full-semester individual projects during the Cand. Scient. Study at Institute of Physics, AAU.

2003 – 2007: Principal supervisor on 3 student projects from 3rd – 6th sem., Co-supervisor on 4 student projects up to 8th sem. at Department of Physics and Nanotechnology, AAU.

2008 – 2011: Co-supervisor on 1 master project with optimization of laser diode properties and 2 bachelor projects at SENSE, SDU.

2012 – Present: Co-supervisor on two master projects (Solar Cells and Nanooptics), Supervisor on four bachelor projects, at least nine 2nd sem. student projects (Energy conversion) and five 1st sem. projects (Windmills) at ITI and MCI, SDU.

Lecturing: 2001 – Present: Teaching 11 courses in: Basic Physics; Fiber Optics; Lab work; Spectroscopy; Electro physics; Electro mechanics: (strengths, deformations, thermal designs and cooling); Advanced Mathematics; Signal processing; Fundamental and experimental Acoustics and Optics; Mathematics and Modeling; Physics; Mathematics.

Memberships: 2008 – Present: The Danish Optical Society (DOPS).
2008 – Present: The Material Research Society (MRS).
2008 – Present: The International Society for Optical Engineering (SPIE).

Reviewing: 2006 – Present: Reviewer for American Physical Society (APS) (Physical Review Letters, Physical Review A, Physical Review B, Physical Review E), American Chemical Society (ACS) (Nanoletters), Optical Society of America (OSA)(Optic Letters, Applied Optics, Optics Express), Material Research Society (MRS), Elsevier (Optics Communications, Optics and Lasers in Engineering), Springer (Journal of Infrared, Millimeter and Terahertz Waves), World Scientific Publishing (Surface Review Letters), Institute of Physics Publishing (Journal of Optics A: Pure and Applied Optics).

Scientific papers:52 articles in peer-reviewed international journals, incl. 1 Nature Communications and 4 Nanoletters. +14 articles in popular journals and conference proceedings.

Web of Knowledge:H-index 19, Authored items found 68, Number of citations 1156 [by April, 2019]. Researcher ID is F-5471-2013. ORCID ID: 0000-0001-9809-2430. Scopus ID: 55940956400

Presentations: 35 talks (15 invited) and 31 posters presented at international conferences.

Prizes:3 prizes for best poster presentation (2002, 2003, 2004), Awarded 2nd place in Business talent of Funen 2011 (“Årets fynske erhverstalent”) and among the 6 best in 2008.

Research interests: Nonlinear far- and near-field scanning optical microscopy; Field enhancements in metal nanostructures; Nano-optics and Plasmonics; Spectroscopy and Sensing; Raman microscopy; (Thermal)-Photovoltaics, and Absorption Engineering; Plasmonic Color Printing.

Ansættelse

Mads Clausen Instituttet (MCI)
SDU
Sønderborg
1. maj 2021 → present

Lektor
SDU Nano Optics
SDU
Odense M
1. maj 2021 → present

Publikationer

CheckNano: nanoparticle detection and sizing
Fiutowski, J., Gupta, P., Laghrissi, A., Adam, J., Rubahn, H-G., Beermann, J., Yezekyan, T., Rehmann, H. & Labes, A., 5. aug. 2021.

Gap-surface plasmon metasurfaces for broadband circular-to-linear polarization conversion and vector vortex beam generation
Heiden, J. T., Ding, F., Linnet, J., Yang, Y., Beermann, J. & Bozhevolnyi, S. I., 3. maj 2019, I: Advanced Optical Materials. 7, 9, 9 s., 1801414.

Laser Writing of Bright Colors on Near-Percolation Plasmonic Reflector Arrays
Roberts, A. S., Novikov, S. M., Yang, Y., Chen, Y., Boroviks, S., Beermann, J., Mortensen, N. A. & Bozhevolnyi, S. I., 2019, I: A C S Nano. 13, 1, s. 71-77

Highly stable silver nanoparticles for SERS applications
Novikov, S. M., Popok, V. N., Evlyukhin, A. B., Hanif, M., Morgen, P., Fiutowski, J., Beermann, J., Rubahn, H. G. & Bozhevolnyi, S. I., 1. jan. 2018, I: Journal of Physics: Conference Series. 1092, s. 1-6 012098.

Highly Stable Monocrystalline Silver Clusters for Plasmonic Applications
Novikov, S. M., Popok, V. N., Evlyukhin, A. B., Hanif, M., Morgen, P., Fiutowski, J., Beermann, J., Rubahn, H. G. & Bozhevolnyi, S. I., 2017, I: Langmuir. 33, 24, s. 6062-6070

Numerical simulations of nanostructured gold films
Repan, T., Frydendahl, C., Novikov, S. M., Beermann, J., Bozhevolnyi, S. I., Mortensen, N. A., Stenger, N., Willatzen, M. & Lavrinenko, A., 2017, *Proceedings of the 17th International Conference on Numerical Simulation of Optoelectronic Devices, NUSOD 2017.* IEEE, s. 5-6 8009963

Optical reconfiguration and polarization control in semi-continuous gold films close to the percolation threshold
Beermann, J., Novikov, S. M., Bozhevolnyi, S. I., Mortensen, N. A., Frydendahl, C., Repän, T., Geisler, M., Lavrinenko, A. V., Xiao, S. & Stenger, N., 2017, I: Nanoscale. 9, 33, s. 12014-12024

White Light Generation and Anisotropic Damage in Gold Films near Percolation Threshold
Novikov, S. M., Frydendahl, C., Beermann, J., Zenin, V., Stenger, N., Coello, V., Mortensen, N. A. & Bozhevolnyi, S. I., 2017, I: ACS Photonics. 4, 5, s. 1207-1215

Light extinction and scattering from individual and arrayed high-aspect-ratio trenches in metals
Roberts, A. S., Søndergaard, T., Chirumamilla, M., Pors, A. L., Beermann, J., Pedersen, K. & Bozhevolnyi, S. I., 4. feb. 2016, I: Physical Review B. 93, 7, s. 1-14 075413.

Enhancement of two-photon photoluminescence and SERS for low-coverage gold films
Novikov, S. M., Beermann, J., Frydendahl, C., Stenger, N., Coello, V., Mortensen, N. A. & Bozhevolnyi, S. I., 2016, I: Optics Express. 24, 15, s. 16743-16751

Plasmonic channel waveguides in random arrays of metallic nanoparticles
Pisano, E., Coello, V., García Ortíz, C. E., Chen, Y., Beermann, J. & Bozhevolnyi, S. I., 2016, I: Optics Express. 24, 15, s. 17080-17089

Scattering and extinction from high-aspect-ratio trenches
Roberts, A. S., Søndergaard, T., Chirumamilla, M., Pors, A. L., Beermann, J., Pedersen, K. & Bozhevolnyi, S. I., 19. nov. 2015. 1 s.

On-chip detection of radiation guided by dielectric-loaded plasmonic waveguides
Han, Z., Radko, I. P., Mazurski, N., Desiatov, B., Beermann, J., Albrektsen, O., Levy, U. & Bozhevolnyi, S. I., 2015, I: Nano Letters. 15, 1, s. 476-480

Plasmonic black metals via radiation absorption by two-dimensional arrays of ultra-sharp convex grooves
Beermann, J., Eriksen, R. L., Holmgaard, T., Pedersen, K. & Bozhevolnyi, S. I., 4. nov. 2014, I: Scientific Reports. 4, 7 s., 6904.

Optical spectroscopy of single Si nanocylinders with magnetic and electric resonances
Evlyukhin, A. B., Eriksen, R. L., Cheng, W., Beermann, J., Reinhardt, C., Petrov, A., Prorok, S., Eich, M., Chichkov, B. N. & Bozhevolnyi, S. I., 2014, I: Scientific Reports. 4, 7 s., 4126.

Plasmonic black metal polarizers for ultra-short laser pulses
Sondergaard, T., Skovsen, E., Lemke, C., Holmgaard, T., Leißner, T., Eriksen, R. L., Beermann, J., Bauer, M., Pedersen, K. & Bozhevolnyi, S. I., 2014, *Plasmonics: Metallic Nanostructures and Their Optical Properties XII.* Boardman, A. D. (red.). SPIE - International Society for Optical Engineering, Bind 9163. 11 s. 916308

Plasmonic black gold based broadband polarizers for ultra-short laser pulses
Skovsen, E., Søndergaard, T., Lemke, C., Holmgaard, T., Leißner, T., Eriksen, R. L., Beermann, J., Bauer, M., Pedersen, K., Bozhevolnyi, S. I. & Søndergaard, T., 18. nov. 2013, I: Applied Physics Letters. 103, 21, 211102.

Highly efficient absorption of visible and near infrared light in convex gold and nickel grooves
Eriksen, R. L., Beermann, J., Søndergaard, T., Holmgaard, T., Pedersen, K. & Bozhevolnyi, S. I., 28. maj 2013. 1 s.

Plasmonic black metals by broadband light absorption in ultra-sharp convex grooves
Beermann, J., Eriksen, R. L., Søndergaard, T., Holmgaard, T., Pedersen, K. & Bozhevolnyi, S. I., 2013, I: New Journal of Physics. 15, 1, 16 s., 073007.

Extraordinary optical transmission with tapered slits: effect of higher diffraction and slit resonance orders
Sondergaard, T., Bozhevolnyi, S. I., Beermann, J., Novikov, S. M., Devaux, E. & Ebbesen, T. W., 2012, I: Journal of the Optical Society of America B: Optical Physics. 29, 1, s. 130-137

Field Enhancement in Plasmonic Gold Nanostructures on Templates of Anodized Aluminum for Sensor Applications
Nielsen, P., Albrektsen, O., Beermann, J. & Morgen, P., 2012, *Nanotechnological Basis for Advanced Sensors* . Reithmaier, J. P., Paunovic, P., Kulisch, W., Popov, C. & Petkov, P. (red.). 1. Edition udg. berlin: Springer, s. 275-280 (NATO Science for Peace and Security Series B: Physics and Biophysics).

Identification of Abnormal Stem Cells Using Raman Spectroscopy
Harkness, L., Novikov, S. M., Beermann, J., Bozhevolnyi, S. I. & Kassem, M., 2012, I: Stem Cells and Development. 21, 12, s. 2152-9 9 s.

Optical properties of spherical gold mesoparticles
Evlyukhin, A. B., Kuznetsov, A. I., Novikov, S. M., Beermann, J., Reinhardt, C., Kiyan, R., Bozhevolnyi, S. I. & Chichkov, B. N., 2012, I: Applied Physics B. 106, 4, s. 841-848

Plasmonic black gold by adiabatic nanofocusing and absorption of light in ultra-sharp convex grooves
Sondergaard, T., Novikov, S. M., Holmgaard, T., Eriksen, R. L., Beermann, J., Han, Z. H., Pedersen, K. & Bozhevolnyi, S. I., 2012, I: Nature Communications. 3, s. 969

Polarization-resolved two-photon luminescence microscopy of V-groove arrays
Beermann, J., Novikov, S. M., Holmgaard, T., Eriksen, R. L., Albrektsen, O., Pedersen, K. & Bozhevolnyi, S. I., 2012, I: Optics Express. 20, 1, s. 654-662

Surface-enhanced Raman microscopy of hemispherical shells stripped from templates of anodized aluminum
Nielsen, P., Novikov, S. M., Beermann, J., Morgen, P., Bozhevolnyi, S. I. & Albrektsen, O., 2012, I: Journal of Raman Spectroscopy. 43, 7, s. 834-841

Field enhancement and extraordinary optical transmission by tapered periodic slits in gold films
Beermann, J., Søndergaard, T., Novikov, S. M., Bozhevolnyi, S. I., Devaux, E. & Ebbesen, TW., 2011, I: New Journal of Physics. 13, 11, 17 s., 063029.

Localized field enhancements in two-dimensional V-groove metal arrays
Beermann, J., Novikov, S. M., Søndergaard, T., Rafaelsen, J., Pedersen, K. & Bozhevolnyi, S. I., 2011, I: Journal of the Optical Society of America B: Optical Physics. 28, 3, s. 372-378

Tuning surface plasmons in interconnected hemispherical Au shells
Nielsen, P., Novikov, S. M., Beermann, J., Morgen, P., Bozhevolnyi, S. I. & Albrektsen, O., 2011, I: Optics Express. 20, 1, s. 534-546

Two-photon luminescence microscopy of large-area gold nanostructures on templates of anodized aluminum
Nielsen, P., Beermann, J., Albrektsen, O., Hassing, S., Morgen, P. & Bozhevolnyi, S. I., 2. aug. 2010, I: Optics Express. 18, 16, s. 17040-52

Two-Photon Luminescence Microscopy of Tunable Gold Nanostructures Randomly Distributed on Templates of Anodized Aluminum
Nielsen, P., Albrektsen, O., Beermann, J., Hassing, S., Morgen, P. & Bozhevolnyi, S. I., 2010.

Extraordinary optical transmission enhanced by nanofocusing
Søndergaard, T., Bozhevolnyi, S. I., Novikov, S. M., Beermann, J., Deavux, E. & Ebbesen, T., 2010, I: Nano Letters. 10, 8 , s. 3123-3128

Field Enhancement in Plasmonic Gold Nanostructures on Templates of Anodized Aluminum for Sensor Applications
Nielsen, P., Albrektsen, O., Beermann, J. & Morgen, P., 2010.

Raman microscopy of individual living human embryonic stem cells
Novikov, S. M., Beermann, J., Bozhevolnyi, S. I., Harkness, L. & Kassem, M., 2010, I: Proceedings of SPIE. 7715, 771537.

Resonant plasmon nanfocusing by closed tapered gaps
Søndergaard, T., Bozhevolnyi, S. I., Beermann, J., Novikov, S. M., Devaux, E. & Ebbesen, T. W., 2010, I: Nano Letters. 10, 1, s. 291-295

Two-Photon Luminescence Microscopy of Tunable Gold Nanostructures Randomly Distributed on Templates of Anodized Aluminum
Nielsen, P., Beermann, J., Albrektsen, O., Hassing, S., Bozhevolnyi, S. I. & Morgen, P., 2010. 7 s.

Two-Photon Luminescence Microscopy of Tunable Gold Nanostructures Randomly Distributed on Templates of Anodized Aluminum
Nielsen, P., Albrektsen, O., Morgen, P., Beermann, J., Hassing, S. & Bozhevolnyi, S. I., 2010.

Plasmonic metasurfaces for waveguiding and field enhancement
Radko, I., Volkov, V. S., Beermann, J., Evlyukhin, A. B., Søndergaard, T., Boltasseva, A. & Bozhevolnyi, S. I., 1. jan. 2009 , I: Laser & Photonics Reviews. 3, 6, s. 575-590

Surface enhanced Raman microscopy with metal nanoparticle arrays
Beermann, J., Novikov, S. M., Leosson, K. & Bozhevolnyi, S. I., 1. jan. 2009, I: Journal of Optics A: Pure and Applied Optics (Print Edition). 11, 7, 5 s., 075004.

Two-photon imaging of field enhancement by groups of gold nanostrip antennas
Novikov, S. M., Beermann, J., Søndergaard, T., Boltasseva, A. & Bozhevolnyi, S. I., 1. jan. 2009, I: Journal of the Optical Society of America B: Optical Physics. 26, 11, s. 2199-2203

Surface enhanced Raman imaging: periodic arrays and individual metal nanoparticles
Beermann, J., Novikov, S. M., Leosson, K. & Bozhevolnyi, S. I., 2009, I: Optics Express. 17, 15, s. 12698-12705

Surface-enhanced Raman imaging of fractal shaped periodic metal nanostructures
Beermann, J., Novikov, S. M., Albrektsen, O., Nielsen, M. G. & Bozhevolnyi, S. I., 2009, I: Journal of the Optical Society of America B: Optical Physics. 26, 12, s. 2370-2376

Theoretical analysis and experimental demonstration of resonant light scattering from metal nanostrips on quartz
Jung, J., Søndergaard, T., Beermann, J., Boltasseva, A. & Bozhevolnyi, S. I., 2009, I: Journal of the Optical Society of America B: Optical Physics. 26, 1, s. 121-124

Nonlinear microscopy of localized field enhancements in fractal shaped periodic metal nanostructures
Beermann, J., Evlyukhin, A., Boltasseva, A. & Bozhevolnyi, S. I., 2008, I: Journal of the Optical Society of America B: Optical Physics. 25, 10, s. 1585-1592

Slow-plasmon resonant-nanostrip antennas: Analysis and demonstration
Sondergaard, T., Beermann, J., Boltasseva, A. & Bozhevolnyi, S. I., 2008, I: Physical Review B. 77, 11, 115420.

Two-photon mapping of localized field enhancements in thin nanostrip antennas
Beermann, J., Novikov, S. M., Søndergaard, T., Boltasseva, A. & Bozhevolnyi, S. I., 2008, I: Optics Express. 16, 22, s. 17302-17309

Comparison of finite-difference time-domain simulations and experiments on the optical properties of gold nanoparticle arrays on gold film
Hohenau, A., Krenn, J. R., García-Vidal, F., Rodrigo, S. G., Martín-Moreno, L., Beermann, J. & Bozhevolnyi, S., 1. sep. 2007, I: Journal of Optics A: Pure and Applied Optics (Print Edition). 9, 9, s. 366-371

Spectroscopy and nonlinear microscopy of gold nanoparticle arrays on gold films
Hohenau, A., Krenn, J. R., Garcia-Vidal, F., Rodrigo, S. G., Martin-Moreno, L., Beermann, J. & Bozhevolnyi, S., 1. feb. 2007, I: Physical Review B. 75, 8, 085104.

Modeling of second-harmonic scanning optical microscopy of molecular quasi-one-dimensional aggregates
Lozovski, V. Z., Beermann, J. & Bozhevolnyi, S., 1. jan. 2007, I: Physical Review B. 75, 4, 045438.

Localized field enhancements in fractal shaped periodic metal nanostructures
Beermann, J., Radko, I., Boltasseva, A. & Bozhevolnyi, S. I., 2007, I: Optics Express. 15, 23, s. 15234-15241

Spectroscopy and nonlinear microscopy of Au nanoparticle arrays: Experiment and theory
Hohenau, A., Krenn, J. R., Beermann, J., Bozhevolnyi, S., Rodrigo, S. G., Martin-Moreno, L. & Garcia-Vidal, F., 1. apr. 2006, I: Physical Review B. 73, 15, s. 155404

Modeling of nonlinear microscopy of localized field enhancements in random metal nanostructures
Beermann, J., Bozhevolnyi, S. I. & Coello, V., 13. mar. 2006, I: Physical Review B. 73, 11, 115408.

Resolution measurements with scanning far- and near-field optical second-harmonic microscopes
Beermann, J., Vohnsen, B. & Bozhevolnyi, S., 2006.

Second-harmonic far-field imcroscopy of random metal nanostructures
Beermann, J., Coello, V. & Bozhevolnyi, S., 2006.

Second-harmonic far-field microscopy of random metal nanostructures
Beermann, J., Coello, V. & Bozhevolnyi, S., 2006.

Second-harmonic far-field microscopy of random metal nanostructures
Beermann, J., Bozhevolnyi, S. & Coello, V., 2006.

Second-harmonic far-field microscopy of random nanostructures
Beermann, J., Coello, V. & Bozhevolnyi, S., 2006.

Second-harmonic microscopy of poled glasses
Beermann, J. & Bozhevolnyi, S., 2006.

Two-photon luminescence microscopy of field enhancement at gold nanoparticles
Beermann, J. & Bozhevolnyi, S. I., 29. nov. 2005, I: Physica Status Solidi. C, Current topics in solid state physics. 2, 12, s. 3983-3987

Two-photon near-field mapping of local molecular orientations in hexaphenyl nanofibers
Beermann, J., Bozhevolnyi, S., Balzer, F. & Rubahn, H-G., 1. okt. 2005, I: Laser Physics Letters. 2, 10, s. 480-484

Two-photon near-field characterization of hexaphenyl nanofibers
Bozhevolnyi, S. I. & Beermann, J., 1. aug. 2005, I: Journal of the Korean Physical Society. 47, 9(1), s. 157-161 5 s.

Modelling of second-harmonic imcroscopy of random metal nanostructures
Beermann, J., Coello, V. & Bozhevolnyi, S., 2005.

Nonliear microscopy of enhancement effects in periodic metal nanostructures
Beermann, J. & Bozhevolnyi, S., 2005.

Nonlinear microscopy of enhancement effects in periodic metal nanostructures
Beermann, J. & Bozhevolnyi, S., 2005.

Second-harmonic microscopy of enhancement effects in periodic metal nanostructures
Beermann, J. & Bozhevolnyi, S., 2005.

Two-photon mapping of molecular orientations in hexaphenyl microrings
Beermann, J., Marquart, C. & Bozhevolnyi, S., 1. maj 2004, I: Laser Physics Letters. 1, 5, s. 264-268 5 s.

Second-harmonic near-field optical microscopy of periodic nanoholes in metal films
Beermann, J. & Bozhevolnyi, S. I., 27. apr. 2004, I: Laser Physics Letters. 1, 12, s. 592-597 6 s.

Microscopy of localized second-harmonic enhancement in random metal nanostructures
Beermann, J. & Bozhevolnyi, S., 1. apr. 2004, I: Physical Review B. 69, 15, 155429.

Two-photon mapping of local molecular orientations in hexaphenyl nanofibers
Beermann, J., Bozhevolnyi, S. I., Bordo, V. & Rubahn, H-G., 2004, I: Optics Communications. 237, 4-6, s. 423-429

Two-photon near-field mapping of molecular orientations in hexaphenyl nanofibers
Beermann, J. & Bozhevolnyi, S., 2004.

Two-photon near-field mapping of molecular orientations in hexaphenyl nanofibers
Beermann, J. & Bozhevolnyi, S., 2004.

Optically active organic microrings
Balzer, F., Beermann, J., Bozhevolnyi, S. I., Simonsen, A. C. & Rubahn, H-G., 1. sep. 2003, I: Nano Letters. 3, 9, s. 1311-1314

High-resolution second-harmonic microscopy of poled silica waveguides
Beermann, J., Bozhevolnyi, S. I., Pedersen, K. & Fage-Pedersen, J., 15. jun. 2003, I: Optics Communications. 221, 4-6, s. 295-300

Direct observation of localized second-harmonic enhancement in random metal nanostructures
Bozhevolnyi, S. I., Beermann, J. & Coello, V., 16. maj 2003, I: Physical Review Letters. 90, 19, 197403.

Optically Active Organic Microrings
Balzer, F., Beermann, J., Bozhevolnyi, S. I., Simonsen, A. C. & Rubahn, H-G., 2003, I: Nano Letters. 3, 9, s. 1311-1314

Second-harmonic far-field microscopy of random metal nanostructures
Beermann, J., Bozhevolnyi, S. & Coello, V., 2003, I: D O P S - Nyt. 18, s. 16-20

Second-harmonic far-field microscopy of random metal nanostructures
Beermann, J., Bozhevolnyi, S. & Coello, V., 2003, *Proceedings of SPIE*. s. 530-540 10 s.

Second-harmonic far-field microscopy of random nanostructured gold surfaces
Coello, V., Beermann, J. & Bozhevolnyi, S., 2003, I: Physica Status Solidi. C, Current topics in solid state physics. 8, s. 3070-3074

Two-photon mapping of molecular orientations in hexaphenyl nanofibers and nanorings
Beermann, J., Bozhevolnyi, S. & Rubahn, H-G., 2003.

Second-harmonic microscopy of poled silica waveguides
Bozhevolnyi, S., Beermann, J. & Pedersen, K., 2002, I: D O P S - Nyt. 17, 2, s. 26-29 4 s.

Aktiviteter

Colours and Optics
Jonas Beermann (Foredragsholder)
3. okt. 2019

Optical sensor possibilities in simple gold structure?
Jonas Beermann (Foredragsholder)
22. feb. 2017

Enhancement of two-photon photoluminescence and SERS for low-coverage gold films
Jonas Beermann (Foredragsholder)
18. nov. 2016

Nanooptics: Micro and Nanotechnologies across the borders
Jonas Beermann (Foredragsholder)
28. apr. 2015

Plasmonic Black metals by broadband light absorption in ultra-sharp convex grooves
Jonas Beermann (Foredragsholder)
1. maj 2014

Plasmonic black metals
Jonas Beermann (Foredragsholder)
22. aug. 2013

Plasmonic Black Gold and Black Nickel
Jonas Beermann (Foredragsholder)
14. aug. 2012

Localized field enhancement in periodic arrays of V-grooves and tapered metal slits
Jonas Beermann (Foredragsholder)
22. sep. 2011

Localized field enhancements in two-dimensional V-groove metal arrays
Jonas Beermann (Foredragsholder)
25. aug. 2011

Strong field enhancement from periodic metal nanoparticles
Jonas Beermann (Foredragsholder)
10. nov. 2010

Surface Enhanced Raman Microscopy with Metal Nanoparticle Arrays
Jonas Beermann (Foredragsholder)
5. okt. 2010

Imaging field enhancements in metal nanostructures
Jonas Beermann (Foredragsholder)
25. aug. 2010

Nanophotonics
Jonas Beermann (Foredragsholder)
15. dec. 2009

Field enhancement in thin nanostrip antennas
Jonas Beermann (Foredragsholder)
2. okt. 2008

Raman spectroscopy and on-chip perspectives
Jonas Beermann (Foredragsholder)
16. sep. 2008

Slow-plasmon resonant nano-strip antennas
Jonas Beermann (Foredragsholder)
16. sep. 2008

Presse/medie

Gennembrud for fremtidens supercomputere
Jonas Beermann & Sergey I. Bozhevolnyi
31/03/2017
1 element af Mediedækning

Manden der gør det umulige muligt
Jonas Beermann
23/01/2019
1 Mediebidrag

SDU - forskere styrer lys rundt om hjørner
Sergey I. Bozhevolnyi & Jonas Beermann
31/03/2017
1 element af Mediedækning