

Dr. Frank Setzpfandt - list of publications

Journal publications

1. S. Saravi, A. N. Poddubny, T. Pertsch, F. Setzpfandt, and A. A. Sukhorukov, "Atom mediated spontaneous parametric down-conversion in periodic waveguides," accepted for publication in Optics Letters
2. R. Guo, M. Decker, F. Setzpfandt, X. Gai, D.-Y. Choi, R. Kiselev, A. Chipouline, I. Staude, T. Pertsch, D. N. Neshev, and Y. S. Kivshar, "High-bit-rate ultra-compact light routing with mode-selective on-chip nanoantennas," *Science Advances* **3**, e1700007 (2017)
3. S. Saravi, T. Pertsch, and F. Setzpfandt, "Generation of Counterpropagating Path-Entangled Photon Pairs in a Single Periodic Waveguide," *Phys. Rev. Lett.* **18**, 183603 (2017)
4. F. Setzpfandt, A. S. Solntsev, and A. A. Sukhorukov, "Nonlocal splitting of photons on a nonlinear chip," *Optics Letters* **41**, 5604 (2016)
5. S. Liu, M. B. Sinclair, S. Saravi, G. A. Keeler, Y. Yang, J. Reno, G. M. Peake, F. Setzpfandt, I. Staude, T. Pertsch, and I. Brener, "Resonantly Enhanced Second-Harmonic Generation Using III–V Semiconductor All-Dielectric Metasurfaces," *Nano Lett.* **16**, 5426 (2016)
6. S. Saravi, R. Quintero-Bermudez, F. Setzpfandt, N. A. Mortensen, and T. Pertsch, "Effect of loss on slow-light-enhanced second harmonic generation in periodic nanostructures," *Optics Letters* **41**, 3110 (2016)
7. L. Wang, A. S. Shorokhov, P. N. Melentiev, S. Kruk, M. Decker, C. Helgert, F. Setzpfandt, A. A. Fedyanin, Y. S. Kivshar, and D. N. Neshev, "Multipolar third-harmonic generation in fishnet metamaterial," *ACS Photonics* **3**, 1494 (2016)
8. F. Setzpfandt, A. S. Solntsev, J. Titchener, C. W. Wu, C. Xiong, R. Schiek, T. Pertsch, D. N. Neshev, and A. A. Sukhorukov, "Tunable generation of entangled photons in a nonlinear directional coupler," *Laser & Photonics Review* **10**, 131 (2016)
9. S. Saravi, S. Dizian, M. Zilk, F. Setzpfandt, and T. Pertsch, "Phase-Matched Second Harmonic Generation in Photonic Crystal Waveguides," *Phys. Rev. A* **92**, 063821 (2015)
10. H. P. Chung, K. H. Huang, S. L. Yang, W. K. Chang, C. W. Wu, F. Setzpfandt, T. Pertsch, D. N. Neshev, and Y. H. Chen, "Adiabatic light transfer in titanium diffused lithium niobate waveguides," *Opt. Express* **23**, 30641 (2015)
11. F. Setzpfandt, W. Sohler, R. Schiek, and T. Pertsch, "Nonlinear coupling in discrete optical waveguide arrays with quadratic nonlinearity," *Phys. Rev. A* **92**, 043832 (2015)

12. R. Geiss, S. Saravi, A. Sergeev, S. Diziain, F. Setzpfandt, F. Schreppe, R. Grange, E.-B. Kley, A. Tünnermann, and T. Pertsch, „Fabrication of nanoscale lithium niobate waveguides for second-harmonic generation,“ *Opt. Lett.* **40**, 2715 (2015)
13. R. Guo, M. Decker, F. Setzpfandt, I. Staude, D. N. Neshev, and Y. S. Kivshar, „Plasmonic Fano Nanoantennas for On-Chip Separation of Wavelength-Encoded Optical Signals,“ *Nano Letters* **15**, 3324 (2015)
14. H. Guo, B. Zhou, M. Steinert, F. Setzpfandt, T. Pertsch, H. Chung, Y. Chen, and M. Bache, "Supercontinuum generation in quadratic nonlinear waveguides without quasi-phase matching," *Opt. Lett.* **40**, 629-632 (2015).
15. A. S. Solntsev, F. Setzpfandt, A. S. Clark, C. W. Wu, M. J. Collins, C. Xiong, A. Schreiber, F. Katzschmann, F. Eilenberger, R. Schiek, W. Sohler, A. Mitchell, C. Silberhorn, B. J. Eggleton, T. Pertsch, A. A. Sukhorukov, D. N. Neshev, and Y. S. Kivshar, "Generation of Nonclassical Biphoton States through Cascaded Quantum Walks on a Nonlinear Chip," *Phys. Rev. X* **4**, 031007 (2014)
16. F. Setzpfandt, A. S. Solntsev, D. N. Neshev, T. Pertsch, W. Sohler, and R. Schiek, „Temporal dynamics of spatially localized waves in quadratic nonlinear waveguide arrays,“ *Phys. Rev. A* **89**, 033863 (2014).
17. F. Setzpfandt, M. Falkner, T. Pertsch, W. Sohler, and R. Schiek, "Bandstructure measurement in nonlinear optical waveguide arrays," *Appl. Phys. Lett.* **102**, 081104 (2013).
18. C. Homann, M. Breuer, F. Setzpfandt, T. Pertsch, and E. Riedle, "Seeding of picosecond and femtosecond optical parametric amplifiers by weak single mode continuous lasers," *Opt. Express* **21**, 730-739 (2013).
19. B. Walther, C. Helgert, C. Rockstuhl, F. Setzpfandt, F. Eilenberger, E.-B. Kley, F. Lederer, A. Tünnermann, and T. Pertsch, „Spatial and Spectral Light Shaping with Metamaterials,“ *Advanced Materials* **24**, 6300 (2012)
20. F. Setzpfandt, A. A. Sukhorukov, and T. Pertsch, "Discrete quadratic solitons with competing second-harmonic components," *Phys. Rev. A* **84**, 053843 (2011)
21. M. C. Rechtsman, Y. V. Kartashov, F. Setzpfandt, H. Trompeter, L. Torner, T. Pertsch, U. Peschel, and A. Szameit, "Negative Goos-Hänchen shift in periodic media," *Opt. Lett.* **36**, 4446 (2011)
22. F. Setzpfandt, A. A. Sukhorukov, D. N. Neshev, R. Schiek, A. S. Solntsev, R. Ricken, Y. Min, W. Sohler, Y. S. Kivshar, and T. Pertsch, "Spectral pulse transformations and phase transitions in quadratic nonlinear waveguide arrays," *Opt. Express* **19**, 23188-23201 (2011).

23. O. Kashin, M. Hohmann, V. Matusevich, F. Setzpfandt, T. Pertsch, and R. Kowarschik, "Change of the refractive index in PPLN waveguides due to the photorefractive effect," *Appl. Phys. B* **104**, 547 (2011)
24. F. Setzpfandt, D. N. Neshev, A. A. Sukhorukov, R. Schiek, R. Ricken, Y. Min, Y. S. Kivshar, W. Sohler, F. Lederer, A. Tünnermann, and T. Pertsch, "Nonlinear dynamics with higher-order modes in lithium niobate waveguide arrays," *Appl. Phys. B* **104**, 487 (2011)
25. F. Setzpfandt, A. A. Sukhorukov, D. N. Neshev, R. Schiek, Y. S. Kivshar, and T. Pertsch, "Phase transitions of nonlinear waves in quadratic waveguide arrays," *Phys. Rev. Lett.* **105**, 233905 (2010)
26. E. Pshenay-Severin, F. Setzpfandt, C. Helgert, U. Hübner, C. Menzel, A. Chipouline, C. Rockstuhl, A. Tünnermann, F. Lederer, and T. Pertsch, "Experimental determination of the dispersion relation of light in metamaterials by white-light interferometry," *J. Opt. Soc. Am. B* **27**, 660 (2010).
27. F. Setzpfandt, D. N. Neshev, R. Schiek, F. Lederer, A. Tünnermann, and T. Pertsch, "Competing nonlinearities in quadratic nonlinear waveguide arrays," *Opt. Lett.* **34**, 3589 (2009).
28. F. Garwe, C. Rockstuhl, C. Etrich, U. Hübner, U. Bauerschäfer, F. Setzpfandt, M. Augustin, T. Pertsch, A. Tünnermann, and F. Lederer, „Evaluation of gold nanowire pairs as a potential negative index material”, *Applied Physics B* **84**, 139 (2006).
29. M. Augustin, R. Iliew, C. Etrich, F. Setzpfandt, H.-J. Fuchs, E.-B. Kley, S. Nolte, T. Pertsch, F. Lederer, and A. Tünnermann, „Dispersion properties of photonic crystal waveguides with a low in-plane index contrast“, *New Journal of Physics* **8**, 210 (2006).

Invited talks at international conferences

1. F. Setzpfandt, "Spontaneous parametric down-conversion in periodically structured media," VI International School and Conference on Photonics - Photonica 2017, Belgrade (2017)
2. A. Vaskin, F. J. F. Löchner, S. Liu, M. Zilk, A. Fedotova, S. Saravi, F. Setzpfandt, I. Staude, I. Brener, and T. Pertsch, "Tailoring Light Emission with Monolithic Nanoantenna Arrays Based on III-V Semiconductors," *Progress in Electromagnetic Research Symposium*, St. Petersburg (2017)
3. T. Bucher, F. J. F. Löchner, S. Fasold, A. Vaskin, P. D. Harrison, K. E. Chong, A. George, F. Eilenberger, Y. S. Kivshar, A. Turchanin, T. Pertsch, F. Setzpfandt, and I. Staude, "Integration of MoS₂ Monolayers with Dielectric Nanoantennas," *Progress in Electromagnetic Research Symposium*, St. Petersburg (2017)

4. F. Setzpfandt, "Frequency conversion in nanostructured lithium niobate," Advances in Nonlinear Photonic Symposium, Minsk (2016).
5. F. Eilenberger, F. J. Löchner, S. Fasold, A. George, P. D. Harrison, T. Bucher, C. Menzel, F. Setzpfandt, I. Staude, A. Turchanin, and T. Pertsch, "Enhancement of Light-matter Interaction in MoS₂ Monolayers by Resonant Nanoparticles," Progress in Electromagnetics Research Symposium, Shanghai, (2016).
6. T. Pertsch, F. Setzpfandt, E.-B. Kley, and A. Tünnermann, „Nonlinear Interactions in Highly Dispersive Nanostructured Lithium Niobate,“ EQEC 2015 - European Quantum Electronics Conference, paper EF_7_1 (2015).
7. F. Setzpfandt, R. Geiss, S. Diziain, S. Saravi, and T. Pertsch, „Resonant lithium niobate nanostructures for nonlinear frequency conversion,“ Progress in Electromagnetics Research Symposium, Prague, (2015).
8. F. Setzpfandt, F. Eilenberger, S. Minardi, A. Tünnermann, and T. Pertsch, „ Complex Nonlinear Dynamics in waveguide arrays: Spatio-temporal solitons and nonlocal nonlinearities,“ Nonlinear Photonics: Theory, Materials, Applications, St. Petersburg, (2015).
9. T. Pertsch, F. Eilenberger, F. Setzpfandt, A. Brown, K. Prater, A. Szameit, S. Minardi, F. Lederer, D. Neshev, A. Sukhorukov, Y. Kivshar, Y. Kartashov and L. Torner, "Nonlinear space-time dynamics in microstructured systems," at International Symposium on Advances in Nonlinear Photonics, Minsk, Belorussia, 24-26 September (2012).
10. T. Pertsch, and F. Setzpfandt, „Spatial Nonlinear Effects with Higher Order Modes in LiNbO₃ Waveguide Arrays,“ 1st International Workshop on Nonlinear Photonics, Kharkov, (2011).

Contributions to international conferences

1. N. Abbasirad, K. Kollin, F. Setzpfandt, and T. Pertsch, "A Fully Automated Dual-Probe Scanning Near-Field Optical Microscopy Technique," in Frontiers in Optics 2017, OSA Technical Digest (online) (Optical Society of America, 2017), paper JW3A.118.
2. B.J. Stanicki, R. Geiss, L. Djurdjevic, F.J.F. Löchner, W.-K. Chang, Y.-H. Chen, F. Setzpfandt, and T. Pertsch, Surface Domain Engineering in Bulk and in Film Lithium Niobate: A Systematic Experimental Study," CLEO/Europe-EQEC (2017), paper CE-8.3.
3. A. Solntsev, P. Kumar, T. Pertsch, A. Sukhorukov, and F. Setzpfandt, "Quantum Spectroscopy on a Nonlinear Photonic Chip," CLEO/Europe-EQEC (2017), paper CD-9.5.
4. F.J.F. Löchner, A. Fedotova, S. Liu, S. Saravi, T. Pertsch, I. Brener, F. Setzpfandt, and I. Staude, "Polarization dependence of second-harmonic generation in GaAs metasurfaces," CLEO/Europe-EQEC (2017), paper EH-9.1.

5. A. S. Solntsev, P. Kumar, T. Pertsch, F. Setzpfandt, and A. A. Sukhorukov, "Integrated Quantum Spectroscopy on a Nonlinear Chip," in Conference on Lasers and Electro-Optics, OSA Technical Digest (online) (Optical Society of America, 2017), paper FTu4D.1.
6. S. Saravi, F. Setzpfandt, and T. Pertsch, "Periodic Waveguides for Generation of Engineered Photon-pair States," in Photonics and Fiber Technology 2016 (ACOFT, BGPP, NP), OSA Technical Digest (online) (Optical Society of America, 2016), paper NTh2A.4.
7. L. Wang, A. Shorokhov, P. Melentiev, S. S. Kruk, M. Decker, C. Helgert, F. Setzpfandt, A. Fedyanin, Y. Kivshar, and D. N. Neshev, "Multipolar Analysis of the Third Harmonic Radiation Pattern from Fishnet Metamaterials," in Photonics and Fiber Technology 2016 (ACOFT, BGPP, NP), OSA Technical Digest (online) (Optical Society of America, 2016), paper NW3A.4.
8. S. Saravi, R. Quintero-Bermudez, F. Setzpfandt, N. A. Mortensen, and T. Pertsch, "How Useful Is Slow Light in Enhancing Nonlinear Interactions in Lossy Periodic Nanostructures?," in Photonics and Fiber Technology 2016 (ACOFT, BGPP, NP), OSA Technical Digest (online) (Optical Society of America, 2016), paper NM4A.7.
9. L. Wang, A. S. Shorokhov, P. N. Melentiev, S. Kruk, M. Decker, C. Helgert, F. Setzpfandt, A. A. Fedyanin, Y. S. Kivshar, and D. N. Neshev, "Multipolar Origin of the Third Harmonic Generation from Fishnet Metamaterials," in Conference on Lasers and Electro-Optics, OSA Technical Digest (online) (Optical Society of America, 2016), paper FW4A.2.
10. S. Saravi, F. Setzpfandt, and T. Pertsch, "Counter-propagating Spatially Entangled Bell-states Generation in Photonic Crystal Waveguides," in Conference on Lasers and Electro-Optics, OSA Technical Digest (online) (Optical Society of America, 2016), paper JTu5A.25.
11. S. Saravi, R. Quintero-Bermudez, F. Setzpfandt, N. A. Mortensen, and T. Pertsch, "Effect of Loss on Slow-light-enhanced Second Harmonic Generation in Periodic Nanostructures," in Conference on Lasers and Electro-Optics, OSA Technical Digest (online) (Optical Society of America, 2016), paper JW2A.59.
12. R. Guo, M. Decker, F. Setzpfandt, X. Gai, D. Choi, R. Kiselev, A. Chipouline, I. Staude, T. Pertsch, Y. S. Kivshar, and D. N. Neshev, "Ultra-compact Polarization Demultiplexing by a Plasmonic Nanoantenna on a Waveguide," in Conference on Lasers and Electro-Optics, OSA Technical Digest (online) (Optical Society of America, 2016), paper FF1B.5.
13. Y. Chen, H. Chung, K. Huang, S. Yang, W. Chang, C. W. Wu, F. Setzpfandt, T. Pertsch, and D. N. Neshev, "Ultra-Broadband Adiabatic Light Transfer in Titanium Diffused Lithium Niobate Waveguides," in Conference on Lasers and Electro-Optics, OSA Technical Digest (online) (Optical Society of America, 2016), paper JW2A.61.

14. F. J. F. Löchner, S. Fasold, A. George, P. D. Harrison, C. Menzel, A. Turchanin, I. Staude, F. Eilenberger, F. Setzpfandt, and T. Pertsch, „Second-harmonic generation in MoS₂ monolayers coupled to resonant nanoantennas,” DPG Frühjahrstagung, Regensburg (2016), paper DS 5.4
15. R. Guo, M. Decker, F. Setzpfandt, X. Gai, D.-Y. Choi, R. Kiselev, A. Chipouline, I. Staude, T. Pertsch, D. N. Neshev, Y. S. Kivshar, „Integrate plasmonic nanoantennas for polarisation sensitive directional waveguide coupling,” SPIE Micro+Nano Materials, Devices, and Applications Conference, Sydney (2015), paper 9668-136
16. F. Setzpfandt, A. Solntsev, J. Titchener, C. W. Wu, C. Xiong, T. Pertsch, R. Schiek, D. N. Neshev, and A. A. Sukhorukov, "Tunable entangled photon-pair generation in a quadratically nonlinear directional coupler," SPIE Micro+Nano Materials, Devices, and Applications Conference, Sydney (2015), paper 9668-49
17. C. W. Wu, A. S. Solntsev, T. Liu, F. Setzpfandt, A. Boes, C. Will, A. Mitchell, D. N. Neshev, A. A. Sukhorukov, "Nonlinear adiabatic couplers for tunable photon-pair Bell state generation with spatial pump filtering," SPIE Micro+Nano Materials, Devices, and Applications Conference, Sydney (2015), paper 9668-48
18. L. Wang, A. S. Shorokov, P. N. Melentiev, M. Decker, C. Helgert, F. Setzpfandt, R. Guo, A. A. Fedyanin, D. N. Neshev, Y. S. Kivshar, "Multipolar third harmonic generation in magnetic fishnet metamaterials," SPIE Micro+Nano Materials, Devices, and Applications Conference, Sydney (2015), paper 9668-46
19. S. Saravi, F. Setzpfandt, and T. Pertsch, „Counter-propagating factorizable photon pairs in slow light lithium niobate photonic crystal slab waveguides,” 2nd EOS Topical Meeting on Optics at the Nanoscale, Capri (2015)
20. D. N. Neshev, R. Guo, M. Decker, F. Setzpfandt, and Y. Kivshar, „Fano Nanoantenna for On-Chip Separation of Wavelength-Encoded Optical Signals,” Metamaterials 2015 - The 9th International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, Oxford (2015)
21. F. Setzpfandt, A. Solntsev, J. Titchener, C. W. Wu, C. Xiong, T. Pertsch, R. Schiek, D. N. Neshev, and A. A. Sukhorukov, "Optically Tunable Entangled Photon State Generation in a Nonlinear Directional Coupler," in Nonlinear Optics, OSA Technical Digest (online) (Optical Society of America, 2015), paper NW2A.4.
22. F. Setzpfandt, R. Schiek, W. Sohler, and T. Pertsch, "Nonlinear Nearest-Neighbor Coupling in Quadratic Waveguide Arrays," in Nonlinear Optics, OSA Technical Digest (online) (Optical Society of America, 2015), paper NM3B.6.
23. R. Schiek, F. Setzpfandt, A. Solntsev, and D. N. Neshev, "Cubic and Quadratic Nonlinear Susceptibilities in Waveguides," in Nonlinear Optics, OSA Technical Digest (online) (Optical Society of America, 2015), paper NM2A.2.

24. F. Setzpfandt, A.S. Solntsev, T. Pertsch, and A. A. Sukhorukov, „Nonlocal Parametric Down-Conversion in Multi-Mode Nonlinear Waveguide Arrays,“ EQEC 2015 - European Quantum Electronics Conference, paper JSV-P.5
25. R. Quintero-Bermudez, S. Saravi, F. Setzpfandt, and T. Pertsch, „Slow-Light Enhanced Second-Harmonic Generation in Periodic Nanobeam Waveguides,“ CLEO/Europe 2015 - European Conference on Lasers and Electro-Optics, paper CK-P.8
26. S. Saravi, S. Diziain, M. Zilk, F. Setzpfandt, and T. Pertsch, „Phase-matched Second Harmonic Generation in Lithium Niobate Slow Light Photonic Crystal Slab Waveguides, “ CLEO/Europe 2015 - European Conference on Lasers and Electro-Optics, paper CD-8.2
27. H. Guo, B. Zhou, M. Steinert, F. Setzpfandt, T. Pertsch, H.-P. Chung, Y.-H. Chen, M. Bache, „Efficient Supercontinuum Generation in Quadratic Nonlinear Waveguides without Quasi-Phase-Matching,“ CLEO/Europe 2015 - European Conference on Lasers and Electro-Optics, paper CF-P.17
28. M. Decker, R. Guo, F. Setzpfandt, I. Staude, D. N. Neshev, Y. Kivshar, „Ultra-Compact On-chip Spectral-Band Demultiplexing with Plasmonic Fano Nanoantennas,“ EQEC 2015 - European Quantum Electronics Conference, paper EH-5.3
29. F. Setzpfandt, A. S. Solntsev, J. Titchener, C. W. Wu, C. Xiong, T. Pertsch, R. Schiek, D. N. Neshev, and A. A. Sukhorukov, „Tunable Entangled Photon States from a Nonlinear Directional Coupler,“ EQEC 2015 - European Quantum Electronics Conference, paper JSV-2.3
30. F. Setzpfandt, W. Sohler, R. Schiek, T. Pertsch, „Discrete Nonlocal Nonlinearity in Quadratic Waveguide Arrays,“ EQEC 2015 - European Quantum Electronics Conference, paper EF-P.21
31. F. Setzpfandt, A. S. Solntsev, J. Titchener, C. W. Wu, C. Xiong, T. Pertsch, R. Schiek, D. N. Neshev, and A. A. Sukhorukov, "Optically tunable entangled photon state generation in a nonlinear directional coupler," in CLEO: 2015, OSA Technical Digest (online) (Optical Society of America, 2015), paper FTh4D.3
32. R. Guo, M. Decker, F. Setzpfandt, I. Staude, D. N. Neshev, and Y. S. Kivshar, "Plasmonic Fano Nanoantenna for On-chip Wavelength Demultiplexing," in CLEO: 2015, OSA Technical Digest (online) (Optical Society of America, 2015), paper SM3I.8.
33. C. W. Wu, A. S. Solntsev, F. Setzpfandt, A. Boes, C. Will, A. Mitchell, D. N. Neshev, and A. A. Sukhorukov, “Nonlinear adiabatic couplers for Bell state generation with spatial pump filtering”, Australian Institute of Physics Congress, (2014)
34. F. Setzpfandt, A. Solntsev, and A. A. Sukhorukov, “Dipole-like biphoton emission in waveguide arrays with nonlocal nonlinearity”, Australian Institute of Physics Congress, (2014)

35. A. S. Solntsev, F. Setzpfandt, A. S. Clark, A. Schreiber, F. Katzschnmann, R. Schiek, W. Sohler, C. Silberhorn, T. Pertsch, A. A. Sukhorukov, D. N. Neshev and Y. S. Kivshar, "Nonlinear Quantum Walks at the Edge of Quadratic Waveguide Arrays", *Nonlinear Optics*, (2013), NW1A.3
36. A. S. Solntsev, A. S. Clark, F. Setzpfandt, M.J. Collins, C. Xiong, A. Wu, F. Eilenberger, A. Schreiber, F. Katzschnmann, R. Schiek, W. Sohler, A. Mitchell, C. Silberhorn, B. J. Eggleton, T. Pertsch, A. A. Sukhorukov, D. N. Neshev, and Y. S. Kivshar, "Simultaneous Photon-Pair Generation and Quantum Walks in a Waveguide Array," in *Frontiers in Optics Conference*, OSA Technical Digest (online) (Optical Society of America, 2012), FTu4D.2
37. A.S. Solntsev, F. Setzpfandt, F. Eilenberger, C. W. Wu, D. N. Neshev, A. A. Sukhorukov, T. Pertsch, and Y. S. Kivshar, „Observation of spontaneous parametric down-conversion in quadratic nonlinear waveguide arrays,“ *Nonlinear Photonics*, Optical Society of America, (2012), NTu4D.2
38. A. S. Solntsev, A. A. Sukhorukov, M. J. Collins, A. S. Clark, C. Xiong, F. Setzpfandt, A. Wu, F. Eilenberger, R. Schiek, A. Mitchell, B. J. Eggleton, T. Pertsch, D. N. Neshev, and Y. S. Kivshar, "Active quantum circuits: integrated photon pair generation and quantum walks", 15th International Conference on Laser Optics, (2012), TuR8-15
39. A. S. Solntsev, F. Setzpfandt, A. Wu, D. N. Neshev, A. A. Sukhorukov, Y. S. Kivshar, and T. Pertsch, "Observation of spontaneous parametric downconversion in LiNbO3 waveguide arrays," in *Conference on Lasers and Electro-Optics (CLEO) and the Quantum Electronics and LaserScience Conference (QELS)* (Optical Society of America, Washington, DC, 2012), JW4A.113
40. F Setzpfandt, A. A. Sukhorukov, D. N. Neshev, R. Schiek, A. S. Solntsev, R. Ricken, Y. Min, W. Sohler, Y. S. Kivshar, and T. Pertsch, "Spatio-temporal dynamics of laser pulses in lithium niobate waveguide arrays," *IQEC / CLEO Pacific Rim Conference Digest*, Australian Optical Society, (2011), 3660-CT-2
41. F. Setzpfandt, A. A. Sukhorukov, D. N. Neshev, R. Schiek, A. S. Solntsev, F. Eilenberger, S. Minardi, R. Ricken, Y. Min, W. Sohler, Y. S. Kivshar, and T. Pertsch, "Nonlinear evolution of laser pulses in lithium niobate waveguide arrays," *Nonlinear Optics: Materials, Fundamentals and Applications*, Optical Society of America, (2011), NThB7
42. F. Setzpfandt, A. A. Sukhorukov, and T. Pertsch, "Discrete solitons with competing second harmonic components in lithium niobate waveguide arrays," *Nonlinear Optics: Materials, Fundamentals and Applications*, Optical Society of America, (2011), NWE17
43. F. Eilenberger, S. Minardi, F. Setzpfandt, and T. Pertsch, "Superluminally Decaying Light Bullets in Periodic Media," *Nonlinear Optics: Materials, Fundamentals and Applications*, Optical Society of America, (2011), NThB6

44. F. Setzpfandt, A. A. Sukhorukov, D. N. Neshev, R. Schiek, A. S. Solntsev, Y. S. Kivshar, and T. Pertsch, "Nonlinear pulse transformation and phase transitions in LiNbO₃ waveguide arrays," CLEO/Europe and EQEC 2011 Conference Digest, Optical Society of America, (2011), EF5_3
45. F. Setzpfandt, A. A. Sukhorukov, and T. Pertsch, "Solitons in waveguide arrays with competing quadratic nonlinearities," CLEO/Europe and EQEC 2011 Conference Digest, Optical Society of America, (2011), EF_P7
46. E. Pshenay-Severin, A. Chipouline, J. Petschulat, U. Hübner, F. Eilenberger, F. Setzpfandt, T. Pertsch, and A. Tünnermann, „Magnetic properties of asymmetric double-wire structures," in Conference on Lasers and Electro-Optics (CLEO) and the Quantum Electronics and LaserScience Conference (QELS) (Optical Society of America, Washington, DC, 2011), QTuD7
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