

ADDRESS

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EDUCATION

Ph.D	Electrical Engineering	California Institute of Technology	2002
M.S.	Electrical Engineering	California Institute of Technology	1997
Diploma	Electrical Engineering	University of Nis, Serbia	1994

APPOINTMENTS

August 2021 – present: Fortinet Founders Chair of Electrical Engineering, Stanford

June 2019 – present: Jensen Huang Professor in Global Leadership, School of Engineering, Professor of Electrical Engineering and by courtesy of Applied Physics, Stanford University

A faculty member of the Ginzton Lab, PULSE Institute, SIMES Institute, Wu-Tsai Neuroscience Institute, and Bio-X

December 2018 – July 2021: Inaugural Director of Q-FARM: Stanford-SLAC Quantum Initiative

September 2014 – June 2019: Professor of Electrical Engineering and by courtesy of Applied Physics, Stanford University; a faculty member of the Ginzton Lab, PULSE Institute, SIMES Institute, and Bio-X

February 2013 – Sept. 2014: Professor of Electrical Engineering, Stanford University; a faculty member of Ginzton Lab

Sept. 2008 – January 2013: Associate Professor of Electrical Engineering (with tenure), Stanford University

January 2003–Aug. 2008: Assistant Professor of Electrical Engineering, Stanford University.

September 2002–December 2002: Acting Assistant Professor of Electrical Engineering, Stanford University.

January 2002–August 2002: Postdoctoral Scholar, Stanford University, Applied Physics Department.

2002: Consultant, Luxtera Inc.

Sept 1996–December 2001: Research and Teaching Assistant, California Institute of Technology.

1996: Research and Teaching Assistant, Communications Science and Engineering Group, School of Electrical Engineering, University of Sydney, Australia.

1994–1995: Research and Teaching Assistant, Faculty of Electronic Engineering, University of Nis, Yugoslavia.

AWARDS and HONORS

2020: James P. Gordon Memorial Speaker, the Optical Society (OSA)

2019: A. F. Harvey Engineering Research Prize, the IET

2019: Distinguished Scholar of the Max Planck Institute for Quantum Optics, Munich, Germany

2018: Fellow of the Institute of Electrical and Electronics Engineers (IEEE)

2015: Fellow of the Optical Society of America (OSA)

2015: Fellow of the American Physical Society (APS), Division of Atomic Molecular and Optical Physics

2013: Hans Fischer Senior Fellow at the Institute for Advanced Studies, Technical University of Munich, Germany

2012: Marko V. Jaric Award for outstanding achievements in physics (the top physics prize in Serbia)

2010: Humboldt Prize (Humboldt Research Award), Alexander von Humboldt Foundation, Germany

2009: Teaching Excellence Award, Society of Women Engineers, Stanford University

2008: Chambers Faculty Scholar, Stanford University

2008: DARPA Young Faculty Award

2007: Presidential Early Career Award for Scientists and Engineers (PECASE)

2006: Okawa Foundation Research Grant Recipient

2006: Office of Naval Research Young Investigator Award

2003: Frederick E. Terman Fellowship, Stanford University

2002: Charles Lee Powell Foundation Faculty Award

1996: Postgraduate Research Award (UPRA) from the University of Sydney, Australia

1994: Silver Sign of the University of Nis, awarded to the best university student in the graduating class

1994: Best student at the Faculty of Electronic Engineering, University of Nis, Serbia

1993, 1991: The October Award (the highest award for student achievements at the University of Nis)

1989-1993 Fellowship from the Foundation for Development of Sciences and Arts, Yugoslavia, awarded to most talented high-school and university students in Yugoslavia (awarded as a high-school student, continued throughout university)

Before 1989: a number of top awards in physics and math competitions in Serbia and Former Yugoslavia.

RESEARCH ACTIVITIES & INTERESTS

Broad definition: experimental and theoretical research in nanophotonics and quantum photonics.

Topics include: Quantum optics, cavity QED, quantum information processing with semiconductor devices; nonlinear optics with nanophotonic structures; inverse nanophotonic design; integrated photonics; on chip laser driven particle accelerators; photonic biosensors.

PROFESSIONAL ACTIVITIES

Advisory roles and boards

Scientific Advisory Board Member, Max Planck Institute of Quantum Optics (MPQ), Munich, Germany, May 2015-December 2023

National Science Foundation (NSF) Engineering Advisory Committee Member, September 2019-July 2021

ETH Zurich, Physics Department – evaluation committee (October 2020)

Advisor, Alphabet X (2017-2019)

Scientific Advisory Board Member, Ferdinand-Braun Institute, Leibnitz Institute for high frequency techniques, Berlin, Germany, April 2015-March 2019

Stanford SystemX Board Member, 2015-2021

Conference organization

International Organizing Committee Member, PECS XIII, March 2023, Tokyo, Japan

Program Committee Member, APS March Meeting, Division of Quantum Information, focus session on “Hybrid Quantum Systems,”, Chicago, IL, March 2022

Program Committee Member, ICOLS (*International Conference on Lasers Spectroscopy*), Estes Park, CO, June 2021

Program Committee Member, Gordon Research Conference on Quantum Science, Stonehill College, Easton, MA, July 2018

Organizing committee, Stanford Workshop on Optimized, Arbitrary and Reconfigurable Optics, Nov. 2017; Stanford Workshop on Advanced Data Center Architectures and Technologies, Dec. 2018; Stanford Quantum Retreat, Dec. 2018

International Advisory Board Member, PECS XII The University of York, UK, April 2016

Quantum Africa II, Sep. 2012, Program Committee member

PECS IX (*9th International Conference on Photonic and Electromagnetic Crystal Structures*), 2010 – International Organizing Committee Member

CLEO/EQEC Europe 2009 – Semiconductor Lasers Committee Member

QELS 2008 - Subcommittee chair for “Fundamental optics in periodic and random media”

IEEE LEOS (*Lasers and Electro-Optics Society*) Nanophotonics Committee Member, 2006

Chair of sessions at numerous conferences including Gordon Research Conferences on Quantum Information Science and Plasmonics, CLEO/QELS, IEEE LEOS Annual Meetings, SPIE Annual Meeting - Photonics West, etc.

Co-organizer of the *Stanford Photonics Research Center Annual Symposium* (Sept. 2003, 2005, 2008, 2010, 2012), *Nanophotonics Workshop at Stanford University* (Jan. 2004), *MURI Center for Photonic Quantum Information Systems Kick-Off and Review Meetings* (Oct. 2003, 2006 and 2007), and the *Quantum Repeater Workshop* (Harvard, November 2005).

Journal editorial and other roles

Associate Editor, *ACS Photonics*, January 2018-present

Editorial Advisory Board Member, *APL Photonics*, July 2019-present

Editorial Advisory Board Member, *Nature Quantum Information*, Aug. 2014-present

Editorial Advisory Board Member, *ACS Photonics*, Jan. 2014-Dec. 2017

Editorial Advisory Board Member, *Nanophotonics*, May 2012-present

Editorial Board, *New Journal of Physics*, Jan. 2014 – Aug. 2014

Co-Editor of the *New Journal of Physics*, Focus Issue on the cavity QED in solids, 2012

Expert Adviser/External Panelist for the Nature Index (Nature Publishing Group), Aug. 2011

Special Issue of the IEEE Journal of Selected Topics in Quantum Electronics (JSTQE) on Quantum and Nanoscale Photonics, 2012 - Primary Guest Editor

Co-Editor of the *New Journal of Physics*, Focus Issue on integrated quantum photonics/optics, 2011

Co-Editor of the *New Journal of Physics*, Focus Issue on Single-Photons on Demand, 2004

Regular reviewer of scientific publications for: *Nature*, *Science*, *Nature Physics*, *Nature Photonics*, *Nature Materials*, *Nature Communications*, *Nature Nanotechnology*, *Nano Letters*, *Applied Physics Letters*, *Physical Review Letters*, *Physical Reviews A, B, E, X*, *IEEE Journal of Quantum Electronics* and *Journal on Selected Topics in Quantum Electronics*, *Photonics Technology Letters*, *Optics Letters*, *Optics Express*, *New Journal of Physics*, etc.

Outreach

Panelist, *Roundtable discussion on Transatlantic Relations in Quantum Research*, the Universities Cologne, Bonn, Aachen and the Forschungszentrum Jülich, November 2021

Speaker, Stanford EE100, October 2021

Speaker, Stanford Sophomore College, September 2021

Speaker, Stanford Program for Inspiring the Next Generation of Women in Physics (SPINWIP), June 2021

Panelist, CLEO 2021 Special Event “Optimizing Career Paths in Optics: The Guide for Young Professionals,”

Guest, Future of Everything radio show, Sirius XM, Stanford, Nov. 2019

Panelist, “Quantum Computing: will it work and when”, CLEO, 2019

Panelist, “What is next in integrated photonics,” CLEO 2019

Panelist, rising stars workshop, Stanford, November 2017

Reddit, Ask me Anything (AMA) host, organized by the Optical Society of America, February 2017

Advisor for Stanford Women in Engineering (WEE) Society (2005-present), Stanford Nanoscience & Nanotechnology Student Society (2008-present), and Stanford EE

Undergraduates Society FUSE (2014-present)

Panelist at various student and professional events

TEACHING AND COURSE DEVELOPMENT

Stanford University, 2003-present:

Introduced, developed, and taught one graduate and three undergraduate classes:

- “Advanced Topics in Optics and Quantum Optics: *Optical Microcavities*” (EE340)
- “Introduction to nanophotonics and nanostructures” (EE136)
- “Freshman seminar: From science fiction to science and engineering” (EE016N)
- Introduction to electromagnetics and its applications (EE42)

Also lectured and helped develop the following classes:

- Applied Quantum Mechanics I (EE222)
- Applied Quantum Mechanics II (EE223)
- Photonics Laboratory (EE234)
- Engineering electromagnetics (EE141/EE142)
- Optics and Quantum Electronics Seminar (AP483)

California Institute of Technology (1996-2001):

Teaching assistant for Solid-state physics (APh114abc), Solid-state devices (EE/APh180), Solid-state electronics for integrated circuits laboratory (APh9)

University of Sydney (1996) and University of Nis, Serbia (1994-1995):

Teaching assistant for a number of courses on solid-state devices, analog and digital circuits.

MENTORING and ADVISING

Present and former PhD students (Stanford University, 2003-present)

1. Hatice Altug (PhD Appl. Phys., 2006): Associate Professor, Bioengineering, EPFL
2. Dirk Englund (PhD Appl. Phys., 2008): Associate Professor with tenure, Electrical Engineering and Computer Science, MIT
3. Ilya Fushman (PhD Appl. Phys., 2008): General partner at Kleiner Perkins
4. Andrei Faraon (PhD Appl. Phys., 2009): Professor of Applied Physics, Materials Science, and Biomedical Engineering, Caltech
5. Maria Makarova (PhD EE, 2010): Lecturer, Technologico de Monterrey, Monterrey, Mexico
6. Yiyang Gong (PhD EE, 2010): Assistant Professor of Biomedical Engineering at Duke
7. Bryan Ellis (PhD EE, 2011): Senior Hardware Development Engineer, Infinera
8. Kelley Rivoire (PhD EE, 2012): Data Scientist, Stripe

9. Arka Majumdar (PhD EE, 2012): Assistant Professor of Electrical Engineering and Physics, University of Washington, Seattle
10. Gary Shambat (PhD EE, 2013): Hardware product lead, Lyft
11. Jesse Lu (PhD EE, 2013): Research Engineer, Stanford
12. Sonia Buckley (PhD Appl. Phys., 2014): Research Scientist, NIST, Boulder
13. Armand Rundquist (PhD EE, 2015): Hardware Development Engineer at Infinera
14. Jan Petykiewitz (PhD EE, 2016): Hardware Engineer, Platform Optics Group, Google
15. Marina Radulaski (PhD Appl. Phys., 2016): Assistant Professor, ECE, UC Davis
16. Yousif Kelaita (PhD EE, 2018): Hardware Engineer, Google
17. Kevin Fischer (PhD EE, 2018): Software Engineer, Nines
18. Alexander Piggott (PhD EE, 2018): Hardware Engineer - Advanced LiDAR at Waymo
19. Linda Zhang (PhD Appl. Phys., 2019): Hardware engineer, Waymo
20. Constantin Dory (PhD EE, 2020): Hardware Engineer, Apple
21. Logan Su (PhD Appl. Phys, 2020): Software Engineer, Waymo
22. Neil Sapra (PhD Physics, 2020): Photonic Design Engineer, Ayar Labs
23. Rahul Trivedi (PhD EE, 2020): Postdoctoral Fellow, Max Planck Institute for Quantum Optics (MPQ), Munich, Germany; incoming Assistant Professor, Department of Electrical Engineering, University of Washington, Seattle
24. Daniil Lukin (PhD EE, expected 2022)
25. Alison Rugar (PhD Appl. Phys, expected 2022)
26. Jinhie Lee Skarda (PhD EE, expected 2022)
27. Geun Ho Ahn (PhD EE, expected 2023)
28. Melissa Guidry (PhD APH, expected 2023)
29. Sattwik Deb Mishra (PhD EE, expected 2023)
30. Guillermo Angeris (PhD EE, expected 2024)
31. Alex White (PhD EE, expected 2024)
32. Joshua Yang (PhD EE, expected 2024)
33. Yakub Grzesik (PhD EE, expected 2025)
34. Hope Lee (PhD Appl. Phys., expected 2025)
35. Dominic Catanzaro (PhD EE, expected 2026)

Present and former MSc students

1. Eliza Cornell, EE co-term MSc, 2018-2019; now a PhD student at Harvard
2. Guillermo Andres Angeris, EE co-term MSc, MSc thesis (co-advised with Stephen Boyd), 2017-present; now a PhD student at Stanford
3. Nicolas Manquest (MSc EE 2010); now a research engineer at Astrium, France

Present and former postdocs, research scientists and engineers

1. Edo Waks (2003-2006): Professor of Electrical and Computer Engineering, University of Maryland and JQI
2. Vanessa Sih (2007-2008): Professor of Physics, University of Michigan
3. Erik Kim (2009-2011): Hardware Engineer, Waymo
4. Michal Bajcsy (2010-2013): Assistant Professor, Institute for Quantum Computing (IQC) and Electrical and Computer Engineering, University of Waterloo, Canada

5. Tom Babinec (2012-2015): Research scientist, Harvard University
6. Kai Mueller (2013-2015): Assistant Professor of Electrical Engineering, Technical University Munich, Germany
7. Konstantinos Lagoudakis (2012-2017): Associate Professor of Physics, University of Strathclyde, Glasgow, UK
8. Tomas Sarmiento (2013-2018): Laser Engineer, Apple
9. Shuo Sun (2017-2020): Assistant Professor of Physics, JILA and UC Boulder
10. Eric Yue Ma (2018-2021): Assistant Professor of Physics and EE, UC Berkeley
11. Jean-Philippe MacLean (2020): Scientist, GHGSat, Montreal, Canada
12. Dries Vercruyse (2016-2020): Optical design engineer, Ayar Labs
13. Shahriar Aghaeimeibodi (2020-2021): Quantum Research Scientist, Amazon
14. Kiyoul Yang (2018-)
15. Daniel Riedel (2020-)
16. Jesse Lu (2020-)
17. Kasper Van Gasse (2021-)
18. Hyounghan Kwon (2021-)
19. Eric Rosenthal (2021-)
20. Chris Anderson (2021-)

OTHER INTERESTS AND SKILLS

Languages: Serbian (native), English (fluent), French (intermediate).

PUBLICATIONS

As of October 2021, >250 published in refereed journals. Work cited over 32000 times, h-index of 88 (Google Scholar)
17 book chapters
18 issued US patents, ~10 pending
Over 400 invited talks, >50 plenary, keynote talks and distinguished lectures
(the list follows; selected publications available online on the website)

PUBLICATIONS LIST

REFEREED JOURNAL PUBLICATIONS

Submitted

1. “Superradiance in dynamically modulated Tavis-Cummings model with spectral disorder,” A.D. White, R. Trivedi, K. Narayanan, J.Vuckovic, submitted to *Physical Review Letters* (2021)
2. “Augmenting On-Chip Microresonator through Photonic Inverse Design,” Geun Ho Ahn, Ki Youl Yang, Rahul Trivedi, Alexander D. White, Logan Su, Jinjie Skarda and Jelena Vuckovic, submitted (2021) [arXiv:2109.07097]
3. “Simulation of Large-Area Metasurfaces with a distributed Transition matrix method,” Jinjie Skarda, Rahul Trivedi, Logan Su, Diego Ahmad-Stein, Hyounghan Kwon, Seunghoon Han, Shanhui Fan, and Jelena Vuckovic, submitted (2021) [arXiv: 2107.09879]
4. “Inverse-designed multi-dimensional silicon photonic transmitter,” K.Y.Yang, A.D.White, F.Ashtiani, C.Shirpurkar, S.V.Pericherla, L.Chang, H H.Song, L.Chang, K.Zou, H.Zhou, K.Pang, J. Yang, M. A. Guidry, D. M. Lukin, H. Hao, L. Trask, G.H.Ahn A.Netherton, T.C. Brilles, K. Van Gasse, J.Skarda, L.Su, D.Vercruysse, J.P. W. MacLean, S.Aghaeimeibodi, M. J. Li, D.A.B.Miller, D. Marom, S.B. Papp, A.E.Willner, J.E.Bowers, P. J. Delfyett, F.Aflatouni, and J.Vuckovic, submitted (2021) [arXiv:2103.14139]
5. “Few-particle scattering from localized quantum systems in spatially structured bosonic baths,” Rahul Trivedi, Kevin Fischer, Shanhui Fan, and Jelena Vuckovic, submitted to *New Journal of Physics* (2020) [arXiv:2009.06860]

Published

1. “Melissa A. Guidry, Daniil M. Lukin, Ki Youl Yang, Rahul Trivedi, and Jelena Vuckovic, Quantum dynamics of Kerr frequency combs,” to appear in *Nature Photonics* (2021) [arXiv:2103.10517]
2. Dries Vercruysse, Neil V. Sapiro, Ki Youl Yang, and Jelena Vuckovic, “Inverse designed photonic crystal devices for optical beam steering,” to appear in *ACS Photonics* (2021) [arXiv:2102.00681]
3. Sattwik Deb Mishra, Rahul Trivedi, Amir H. Safavi-Naeini, and Jelena Vuckovic, “Quantum control of microwave-to-optical transducers for inhomogeneous broadening compensation,” to appear in *Physics Review Applied* (2021) [arxiv:2012.01718]
4. Alison E. Rugar, Shahriar Aghaeimeibodi, Daniel Riedel, Constantin Dory, Haiyu Lu, Patrick J. McQuade, Zhi-Xun Shen, Nicholas A. Melosh, and Jelena Vuckovic, “A Quantum Photonic Interface for Tin-Vacancy Centers in Diamond,” *Physical Review X*, vol. 11, 031021 (2021)

See also a Physics Viewpoint: “Tin Qubits Give Diamond a New Shine,” Evangelia Takou and Sophia E. Economou, *Physics* 14, 105 (2021)

5. Guillermo Angeris, Jelena Vuckovic, Stephen Boyd, “Convex restrictions in physical design,” *Scientific Reports*, vol. 11, article 12976 (2021)
6. Rahul Trivedi, Daniel Malz, Shanhui Fan and Jelena Vuckovic, “Optimal two-photon excitation of bound states in non-Markovian waveguide QED,” *Physical Review A*, vol. 104, 013705 (2021) [arXiv:2009.08602]
7. Shahriar Aghaeimeibodi, Daniel Riedel, Alison E. Rugar, Constantin Dory, and Jelena Vuckovic, “Electrical control of tin-vacancy centers in diamond,” *Physical Review Applied*, vol. 15, 064010 (2021) [editor’s suggestion]
8. Leo Yu, Minda Deng, Jingyuan Linda Zhang, Sven Borghardt, Beata Kardynal, Jelena Vučković, and Tony F. Heinz, “Site-Controlled Quantum Emitters in Monolayer MoSe₂,” *Nano Letters*, vol. 21, pp. 2376-2381, <https://doi.org/10.1021/acs.nanolett.0c04282> (2021)
9. Kai Wang, Avik Dutt, Ki Youl Yang, Casey Wojcik, Jelena Vuckovic, and Shanhui Fan, “Generating arbitrary topological windings of a non-Hermitian band,” *Science*, Vol. 371, Issue 6535, pp. 1240-1245, DOI: 10.1126/science.abf6568 (2021)
10. Guillermo Angeris, Jelena Vuckovic, Stephen Boyd, “Heuristic Methods and Performance Bounds for Photonics Inverse Design,” *Optics Express* vol. 29, No. 2, pp. 2827-2854, (2021) [invited review article]
11. Daniil M. Lukin, Melissa A. Guidry, and Jelena Vuckovic, “Integrated quantum photonics with silicon carbide: challenges and prospects,” *Physical Review X Quantum*, vol. 1, 020102 (2020) [invited perspective article]
12. Ehud Altman, Kenneth R. Brown, Giuseppe Carleo, Lincoln D. Carr, Eugene Demler, Cheng Chin, Brian DeMarco, Sophia E. Economou, Mark Eriksson, Kai-Mei C. Fu, Markus Greiner, Kaden R. A. Hazzard, Randall G. Hulet, Alicia J. Kollar, Benjamin Lev, Mikhail Lukin, Ruichao Ma, Xiao Mi, Shashank Misra, Chris Monroe, Kater Murch, Zaira Nazario, Kang-Kuen Ni, Andrew C. Potter, Pedram Roushan, Mark Saffman, Monika Schleier-Smith, Irfan Siddiqi, Raymond Simmonds, Meenakshi Singh, I. B. Spielman, Kristan Temme, David S. Weiss, Jelena Vuckovic, Vladan Vuletic, Jun Ye, and Martin Zwierlein, “Quantum Simulators: Architectures and Opportunities,” *Physical Review X Quantum*, vol. 2, 017003 (2021)
13. David Awschalom, Karl K. Berggren, Hannes Bernien, Sunil Bhave, Lincoln D. Carr, Paul Davids, Sophia E. Economou, Dirk Englund, Andrei Faraon, Marty Fejer, Saikat Guha, Martin V. Gustafsson, Evelyn Hu, Liang Jiang, Jungsang Kim, Boris Korzh, Prem Kumar, Paul G. Kwiat, Marko Lončar, Mikhail D. Lukin, David A. B. Miller, Christopher Monroe, Sae Woo Nam, Prineha Narang, Jason S. Orcutt, Michael G. Raymer, Amir H. Safavi-Naeini, Maria Spiropulu, Kartik Srinivasan, Shuo Sun, Jelena Vučković, Edo Waks, Ronald Walsworth, Andrew M. Weiner, Zheshen Zhang, “Development of Quantum Inter-Connects (QuICs) for Next-Generation Information Technologies,” *Physical Review X Quantum*, vol. 2, 017002 (2021)
14. Mahla Pudineh, Caitlin L. Maikawa, Eric Yue Ma, Jing Pan, Dan Mamerow, Yan Han, Sam Baker, Ahmad Beirami, Michael Eisenstein, Seung Kim, Jelena Vuckovic, Eric A. Appel,

- Hyongsok Tom Soh, “A fluorescence sandwich immunoassay for the real-time continuous detection of glucose and insulin in live animals,” *Nature Biomedical Engineering*, vol. 5, pages 53–63, doi: <https://doi.org/10.1101/2020.01.22.916106> (2021)
15. Eva Scholl, Lucas Schweickert, Lukas Hanschke, Katharina D. Zeuner, Friedrich Sbresny, Thomas Lettner, Rahul Trivedi, Marcus Reindl, Saimon Filipe Covre da Silva, Rinaldo Trotta, Jonathan J. Finley, Jelena Vuckovic, Kai Mueller, Armando Rastelli, Val Zwiller, and Klaus D. Jons, “The crux of using the cascaded emission of a 3-level quantum ladder system to generate indistinguishable photons,” *Physical Review Letters* vol. 125, 233605 (2020)
 16. Hanzhe Liu, Giulio Vampa, Jingyuan Linda Zhang, Yu Shi, Siddharth Buddhiraju, Shanhui Fan, Jelena Vuckovic, Philip H. Bucksbaum, David A. Reis, “Overcoming the absorption limit in high-harmonic generation from crystals,” *Physics Communications*, DOI 10.1038/s42005-020-00472-5 (2020)
 17. Rahul Trivedi, Alex White, Shanhui Fan, and Jelena Vuckovic, “Analytic and geometric properties of scattering from periodically modulated quantum-optical systems,” *Physical Review A*, vol. 102, 033707 (2020)
 18. Daniil M. Lukin, Alexander D. White, Melissa A. Guidry, Rahul Trivedi, Naoya Morioka, Charles Babin, Oney Soykal, Jawad Ul-Hassan, Nguyen Tien Son, Takeshi Ohshima, Praful Vasireddy, Mamdouh Nasr, Shuo Sun, Jean-Philippe W. MacLean, Constantin Dory, Emilio A. Nanni, Joerg Wrachtrup, Florian Kaiser, and Jelena Vuckovic, “Spectrally reconfigurable quantum emitters enabled fast optical modulation,” *NPJ Quantum Information*, vol. 6, article 80, DOI 10.1038/s41534-020-00310-0 (2020)
 19. Alison E. Rugar, Constantin Dory, Shahriar Aghaeimeibodi, Haiyu Lu, Shuo Sun, Sattwik Deb Mishra, Zhi-Xun Shen, Nicholas A. Melosh, and Jelena Vuckovic, “Narrow-linewidth tin-vacancy centers in a diamond waveguide,” *ACS Photonics*, vol. 7, No. 9, pp. 2356-2361 <https://dx.doi.org/10.1021/acsp Photonics.0c00833> (2020) [arXiv:2005.10385]
 20. Melissa Guidry, Kiyoul Yang, Daniil Lukin, Ashot Markosyan, Joshua Yang, Martin Fejer, and Jelena Vuckovic, “Optical parametric oscillation in silicon carbide nanophotonics,” *Optica*, vol. 7, No. 9, pp. 1139-1142, <https://doi.org/10.1364/OPTICA.394138> (2020)
 21. Rahul Trivedi, Guillermo Angeris, Logan Su, Stephen Boyd, Shanhui Fan, Jelena Vuckovic, “Bounds for scattering from absorption-less electromagnetic structures,” *Physical Review Applied*, vol. 14, 014025 (2020) [arXiv:2003.00374]
 22. Peter Udvarhelyi, Gergio Thiering, Naoya Morioka, Charles Babin, Florian Kaiser, Daniil Lukin, Takeshi Ohshima, Jawad Ul-Hassan, Nguyen Tien Son, Jelena Vuckovic, Joerg Wrachtrup, and Adam Gali, “Vibronic states and their effect on the temperature and strain dependence of silicon-vacancy qubits in 4H silicon carbide,” *Physical Review Applied*, vol. 13, 054017 (2020) [arXiv:2001.02459]
 23. Ki Youl Yang, Jinjie Skarda, Michele Cotrufo, Avik Dutt, Geun Ho Ahn, Mahmoud Sawaby, Dries Vercauteren, Amin Arbabian, Shanhui Fan, Andrea Alu, and Jelena Vuckovic, “Inverse-designed nonreciprocal switch for chip-based optical ranging,” *Nature Photonics* vol. 14, pp. 369–374 (2020) <https://doi.org/10.1038/s41566-020-0606-0> (2020)

Featured in *Stanford News*, *ScienceDaily*, *EurekaAlert*, *Phys.org*, *Ars Technica* etc.

Featured in News and Views article “Low-loss nonlinear optical isolators in silicon,” Eric Kittlaus, Peter Weigel, William Jones, *Nature Photonics*, vol. **14**, pp. 338–339(2020)

24. Logan Su, Dries Vercruyssen, Jinhie Skarda, Neil V. Saprà, Jan Petykiewicz, Jelena Vuckovic, “Nanophotonic Inverse Design with SPINS: Software Architecture and Practical Considerations,” *Applied Physics Review*, vol. 7, No. 1, DOI: 10.1063/1.5131263 (2020) [invited article]

25. Alexander Y. Piggott*, Eric Y. Ma*, Logan Su*, Geun Ho Ahn, Neil V. Saprà, Dries J.F. Vercruyssen, Andrew M. Netherton, Akhilesh S.P. Khope, John E. Bowers and Jelena Vuckovic, “Inverse-designed photonics for semiconductor foundries,” *ACS Photonics*, vol. 7, No. 3, pp. 569-575 <https://doi.org/10.1021/acsp Photonics.9b01540> (2020)

Featured by ACS Photonics on the International Day of Light (May 16) as one of the most important contributions to the journal for the last 12 months

26. Alison E. Rugar, Haiyu Lu, Constantin Dory, Shuo Sun, Patrick J. McQuade, Zhi-Xun Shen, Nicholas A. Melosh, and Jelena Vuckovic, “Generation of Tin-Vacancy Centers in Diamond via Shallow Ion Implantation and Subsequent Diamond Overgrowth,” *Nano Letters*, vol. 20, 1614-1619, doi: <https://doi.org/10.1021/acs.nanolett.9b04495> (2020)

27. Rahul Trivedi, Kevin Fischer, Jelena Vuckovic, Kai Mueller, “Generation of non-classical light using semiconductor quantum dots,” *Advanced Quantum Technologies* <https://doi.org/10.1002/qute.201900007> (2019) [invited review article]

28. Rahul Trivedi, Logan Su, Jesse Lu, Martin F. Schubert, and Jelena Vuckovic, “Data-driven acceleration of photonic simulations and optimizations,” *Scientific Reports*, vol. 9, article 19728 (2019)

29. Fariah Hayee, Leo Yu, Jingyuan Linda Zhang, Christopher, Ciccarino, Minh Nguyen, Igor Aharonovich, Jelena Vuckovic, Prineha Narang, Tony Heinz, Jennifer Dionne, “Revealing multiple classes of stable quantum emitters in hexagonal boron nitride via correlated optical and electron spectroscopy,” *Nature Materials*, <https://doi.org/10.1038/s41563-020-0616-9> (2020)

30. Neil V. Saprà, Ki Youl Yang, Dries Vercruyssen, Kenneth J. Leedle, Dylan S. Black, Logan Su, Rahul Trivedi, Yu Miao, Olav Solgaard, Robert L. Byer, Jelena Vuckovic, “On-chip laser driven particle accelerator,” *Science* Vol. 367, Issue 6473, pp. 79-83 (2020)

Featured in *Stanford News*, *Scientific American*, *Vice*, *Tech Crunch*, *Popular Mechanics*, *Optics and Photonics News*, *Wire*, *Eurekalert*, *Phys.org*, *Physics World*, *Stanford Daily*, *EE News*, *Nature Review Materials*, etc

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 3. Marina Radulaski, Jelena Vučković, "Quantum Photonics Incorporating Color Centers in Silicon Carbide and Diamond," *Proceedings on Latest achievements in Physics on the Occasion of the 20th Anniversary of the "Prof. Dr Marko V. Jaric" Foundation* [book chapter] (2018)
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PLENARY AND KEYNOTE TALKS

1. Jelena Vuckovic, *ICPS 2020 (International Conference on Physics of Semiconductors), Perspectives in Semiconductor Physics: Nobel Laureates, Community Leaders*, Sydney, Australia, June 26-July 1st, 2022 [plenary]
2. Jelena Vuckovic, *Conference on Defects in Solids for Quantum Technologies (DSQT2020)*, Stockholm, Sweden, June 2022 [keynote]
3. Jelena Vuckovic, *Optical Fiber Communication Conference and Exhibition (OFC) 2022*, San Diego, CA, March 2022 [tutorial]
4. Jelena Vuckovic, *SPIE Photonics West OPTO*, San Francisco, California, Jan 22 – 27, 2022 [plenary]
5. Jelena Vuckovic, *SIT Insights in Technology 2021*, December 2021 [keynote]
6. Jelena Vuckovic, *Spanish Optical Society Annual Meeting*, Nov. 2021 [plenary]
7. Jelena Vuckovic, *Photonics & Electromagnetics Research Symposium (PIERS)*, November 2021 [keynote]

8. Jelena Vuckovic, *Annual Spring Meeting of the German Physical Society DPG*, Berlin, Germany, Sept. 27-Oct. 1st 2021 [plenary]
9. Jelena Vuckovic, *Hybrid Photonic and Quantum Low-dimensional Materials Symposium*, Sandia National Labs, September 21-23, 2021 [plenary]
10. Jelena Vuckovic, *MetaNano 2021* [keynote]
11. Jelena Vuckovic, *OSA Optical Imaging and Sensing*, July 2021 [plenary]
12. Jelena Vuckovic, *Photonics North*, May 31st - June 2nd, 2021 [keynote]
13. Jelena Vuckovic, *Quantum Days*, January 2021 [keynote]
14. Jelena Vuckovic, *Photonics Online Meetup*, January 2021 [tutorial]
15. Jelena Vuckovic, *European Semiconductor Laser Workshop 2020* [keynote]
16. Jelena Vuckovic, *Quantum 2020*, October 19-22 2020 [plenary]
17. Jelena Vuckovic, "Optimized Photonics," *14th Pacific Rim Conference on Lasers and Electro-Optics (CLEO Pac Rim)*, Sydney, Australia, Aug 2-6, 2020 [tutorial]
18. Jelena Vuckovic, *OSA Advanced Photonics Conference*, Montreal, Canada, July 13-16, 2020 [plenary]
19. Jelena Vuckovic, *Quantum Technologies conference at SPIE Photonics Europe*, Strasbourg, France, March 29 - April 2 2020 [plenary]
20. Jelena Vuckovic, *Aspen Winter Conference on Quantum Information and Systems for Fundamental Physics*, Aspen, CO, Feb. 17-22, 2020 [public lecture]
21. Jelena Vuckovic *Micro- and Nanophotonics Days 2019*, Centre for Nanoscience and Nanotechnology of the CNRS, Paris Saclay, November 20-21, 2019 [keynote]
22. Jelena Vuckovic, *IEEE Photonics Society Annual Meeting (IPC)*, San Antonio, TX, October 2019 [plenary]
23. Jelena Vuckovic, *Frontiers in Optics - Laser Science (FiO-LS) Conference*, Washington, D.C. September 16-19, 2019 [visionary talk]
24. Jelena Vuckovic, *2019 SPIE Optics + Photonics meeting*, August 2019 [plenary]
25. Jelena Vuckovic, 10th International Conference on Metamaterials, Photonic Crystals and Plasmonics (META 2019) will be held in Lisbon - Portugal, July 23-26, 2019 [keynote]
26. Jelena Vuckovic, *ICOLS 2019*, Queenstown, New Zealand, July 8-12, 2019
27. Jelena Vuckovic, a plenary presentation at the *Central European Workshop on Quantum Optics (CEWQO)*, Paderborn, Germany, June 3rd - 7th, 2019 [plenary]
28. Jelena Vuckovic, *IEEE New Frontiers in Computing (NFIC) Conference*, Stanford University, May 14, 2019 [keynote]
29. Jelena Vuckovic, "Quantum Photonics with Defect Centers," *European Conference on Atomic, Molecular and Optical Physics (ECAMP-13)*, Florence, Italy April 8-12, 2019 [plenary]

30. Jelena Vuckovic, *Quantum Innovators in Science and Engineering workshop, the Institute for Quantum Computing (IQC)*, University of Waterloo, ON, Canada, Oct. 2018 [plenary]
31. Jelena Vuckovic, *Opportunities for Quantum Technologies 2018 (Quantum Opportunities 2018), Quantum Tech Dialogue*, Vancouver, Canada, October 3rd, 2018 [keynote]
32. Jelena Vuckovic, "From inverse design to implementation of practical nanophotonics," *the 15th international conference on Near-field Optics, Nanophotonics and Related Techniques (NFO-15)*, University of Technology of Troyes, Troyes, France, August 26-31st, 2018 [plenary]
33. Jelena Vuckovic, *Workshop on "The Quantum Internet; Charting the Critical Path,"* University of Toronto, Toronto, CA, Jun 21-23, 2018 [keynote]
34. Jelena Vuckovic, "Quantum hardware," *International Foresign Forum: Quantum Computing and Silicon Photonics*, Taipei, Taiwan, June 2018 [keynote]
35. Jelena Vuckovic, *The DATE (Design, Automation, Test and Embedded Systems) Conference*, NanoDay, Dresden, Germany, March 21, 2018 [keynote]
36. Jelena Vuckovic, *Symposium on "Advancing Electronics,"* Dresden excellence cluster "Center for Advancing Electronics Dresden (CfAED)", Dresden, Germany, 19 March 2018 [keynote]
37. Jelena Vuckovic, "Quantum nanophotonics," *CLEO (Conference on Lasers and Electro-Optics)*, San Jose, CA, June 5-10, 2016 [plenary]
38. Jelena Vuckovic, "Inverse design and implementation of compact and efficient nanophotonic circuits," *SPIE Optical Microlithography*, San Jose, CA, 21 - 25 February 2016 [keynote]
39. Jelena Vuckovic, "Nanophotonic devices: from nanolasers to single cell probes," *58th International Conference on Electron, Ion, Photon Beam Technology, and Nanofabrication (EIPBN2014, also known as "Three Beams")*, Washington, DC, May 27-30, 2014 [plenary]
40. Jelena Vuckovic, "Quantum Nano-Optics," *Annual Meeting of the German Physical Society (DPG)*, March 19, 2014 [plenary]
41. Gary Shambat and Jelena Vuckovic, "Single Cell Nanocavity Probes," Plenary session of the *BiOS Hot Topics*, BiOS/Photonics West conference, San Francisco February 1st, 2014
42. Jelena Vuckovic, "Quantum dots in optical nanocavities: from cavity QED to device applications," *Australian Institute of Physics Congress*, Sydney, Australia, Dec. 9-13, 2012 [plenary]
43. Jelena Vuckovic, "(Solid-state) cavity QED for quantum and classical information processing" *IEEE Summer Topical Meeting on "Entanglement Distribution in Quantum Communication and Beyond,"* Montreal, Quebec, Canada, July 18-20, 2011 [plenary]
44. Jelena Vuckovic, "Photonic crystals and quantum dots: from cavity QED, to single photon nonlinear optics and efficient information processing," *Photonica 2011, 3rd International School and Conference on Photonics*, Belgrade, Serbia August 29-Sept. 2nd 2011 [keynote]
45. Jelena Vuckovic, "Generation and Manipulation of Classical and Nonclassical Light Using Photonic Crystals," *12th Int'l Conf. on Modulated Semiconductor Structures (MSS12) and Int'l Conf. on Electronic Properties of Two-Dimensional Systems (EP2DS-16)*, Albuquerque,

NM, July 2005. [plenary]

DISTINGUISHED LECTURES

46. Jelena Vuckovic, *Dresselhaus Lecture*, MIT, November 2021
47. Jelena Vuckovic, *Charles L. Brown Distinguished Colloquium series*, University of Virginia, February 2021
48. Jelena Vuckovic, *Distinguished Lecturer Seminar, Max Planck Institute for the Science of Light (MPL)*, Erlangen, Germany, Nov. 2020
49. Jelena Vuckovic, *Distinguished Grace Hopper Lecture, University of Pennsylvania*, November 2020
50. Jelena Vuckovic, *Distinguished Seminar Series in Nanoscience, Kavli Nanoscience Institute (KNI)*, California Institute of Technology (Caltech), Pasadena, CA, January 2020
51. Jelena Vuckovic, *ECE Distinguished Colloquium Speaker*, Boston University, January 2019
52. Jelena Vuckovic, “Quantum nanophotonics,” *Distinguished Lecture, Munushian Lecturer Series*, Electrical Engineering-Electrophysics, University of Southern California, Los Angeles, April 2017

INVITED TALKS AT MAJOR INTERNATIONAL CONFERENCES

53. Jelena Vuckovic, *Frontiers of Quantum Information Science*, Vienna, Austria, September 4-9, 2022
54. Jelena Vuckovic, “Quantum Computing, Communication and Simulation”, *Photonics West-OPTO-2022*, San Francisco, CA, January 2022
55. Jelena Vuckovic, OE303 “High Contrast Metastructures IX”, *Photonics West-OPTO-2022*, San Francisco, CA, January 2022
56. Jelena Vuckovic, *International Symposium on Novel materials and quantum Technologies (ISNTT) 2021*, NTT, Japan, December 2021
57. Shahriar Aghaeimeibodi, Jelena Vuckovic, *IEEE International Electron Devices Meeting (IEDM)*, San Francisco, CA, Dec. 2021
58. Jelena Vuckovic, *Symposium EQ01 “Quantum Optical Materials and Devices Based on Impurity Systems” at Materials Research Society (MRS) Fall 2021 Meeting*, Boston, MA, Nov. 28-Dec. 3, 2021
59. Kiyoul Yang, Jelena Vuckovic, *Photonics & Electromagnetics Research Symposium (PIERS)*, “SC2&SC3: Intelligent Photonics”, November 2021
60. Jelena Vuckovic, *OSA Conference on Photonics in Switching and Computing*, September 27-29, 2021

61. Kiyoul Yang, Jelena Vuckovic, Automotive LIDAR 2021 conference, September 21-23 (2021)
62. Jelena Vuckovic, Special Session on "Fundamental Performance Limits in Photonics" *Metamaterials Congress*, New York City on Sept. 20-25, 2021
63. Daniil Lukin, Jelena Vuckovic, *Quantum Applications Conference (QuApps2021)*, "Materials and Enabling Technologies for Quantum Technology", September 2021
64. Jelena Vuckovic, *IEEE Optical MEMS and Nanophotonics Conference and Summer School*, August 2021
65. Jelena Vuckovic, *SPIE Optics & Photonics symposium, Conference on Metamaterials, Metadevices, and Metasystems*, Special session on Deep Learning in Photonics, San Diego, CA, Aug. 1-5, 2021
66. Jelena Vuckovic, *OSA Nonlinear Optics Topical Meeting*, Waikoloa Beach Marriott Resort & Spa, Waikoloa Beach, Hawaii United States, July 12-15, 2021
67. Jelena Vuckovic, *Conference on Lasers and Electro-Optics Europe (CLEO/Europe) and the European Quantum Electronics Conference (EQEC)*, Munich, Germany, June 20 - 24, 2021
68. Jelena Vuckovic, *Electron Beam Spectroscopy for Nano-Optics (EBSN)*, June 2021
69. Jelena Vuckovic, *Optical Fiber Communications (OFC), Workshop on Quantum Photonic Emitters and Integrated Quantum Photonics*, June 2021
70. Jelena Vuckovic, *Conference on Lasers and Electro-Optics (CLEO), Special Symposium on Microwave-to-optical quantum interconnects*, San Jose, CA, May 9-14, 2021.
71. Jelena Vuckovic, "Scalable quantum systems combining spins in semiconductors, optimized photonics, and Floquet engineering," *APS March Meeting, Advances in Quantum Technologies: Hybrid Systems (DQI)*, March 2021
72. Jelena Vuckovic, *Photonic and Phononic Properties of Engineered Nanostructures, Photonics West*, San Francisco CA, March 2021
73. Jelena Vuckovic, *Integrated Optics: Devices, Materials, and Technologies conference, Photonics West*, San Francisco CA, March 2021
74. Jelena Vuckovic, *Photonics Spectra Conference*, January 2021,
75. Jelena Vuckovic, *MRS 2020 Fall meeting*, Boston, USA, November 29 - December 4, 2020
76. Jelena Vuckovic, *IEEE Photonics Conference (IPC2020)*, Vancouver, Canada 27 September - 1 October 2020
77. Jelena Vuckovic, *Frontiers in Optics/ Laser Science*, Washington DC, September 13-17, 2020
78. Dries Verduynst, Jelena Vuckovic, *IEEE Research and Applications of Photonics in Defense (RAPID) Conference*, Sandestin Beach, Florida, Aug. 10-12, 2020
79. Guillermo Angeris, Rahul Trivedi, Logan Su, Stephen Boyd, Jelena Vuckovic, "Computational bounds of photonic devices," *META2020*, Warsaw, Poland, July 20-23, 2020

80. Jelena Vuckovic, "Connecting and scaling semiconductor quantum photonic systems," *Photonics for Quantum (PfQ2)*, Rochester Institute of Technology (RIT), June 2020
81. Jelena Vuckovic, "Quantum integrated photonics," *CLEO Science and Innovations*, San Jose, CA, May 2020
82. Jelena Vuckovic, "From inverse design to implementation of practical photonics," *MRS Spring Meeting*, Phoenix, Arizona, April 13 -17, 2020
83. Logan Su, Jelena Vuckovic, *2020 International Applied Computational Electromagnetics Society (ACES) Symposium*, March 22-26, 2020, in Monterey, California, USA
84. Jelena Vuckovic, *Special Symposium on Quantum Information Science and Technology (QIST), Optical Fiber Communication Conference and Exhibition (OFC 2020)*, San Diego, CA, March 9-10, 2020
85. Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2-6, 2020
86. Jelena Vuckovic, *Aspen Winter Conference on Quantum Information and Systems for Fundamental Physics*, Aspen, CO, Feb. 17-22, 2020
87. Jelena Vuckovic, Rahul Trivedi, Winter Colloquium on the Physics of Quantum Electronics (PQE), Snowbird, UT, Jan 5-10, 2020.
88. Kiyoul Yang, Jinhie Skarda, Jelena Vuckovic, "From inverse design to implementation of practical photonics," *IEEE/ACM ICCAD Conference*, Westminster, CO, Nov. 2019
89. Logan Su, Jelena Vuckovic, Workshop on "New modelling challenges in optical communications," *European Conference on Optical Communication 2019, ECOC2019*, Dublin, Ireland, Sept. 2019
90. Jelena Vuckovic, *Symposium on "Nanoscale and molecular assemblies: Designing matter to control energy transport" Fall 2019 American Chemical Society Meeting, San Diego, CA from August 25 - 29, 2019*
91. "Inverse design and demonstration of laser driven particle accelerators on chip, Neil V. Sapiro, Ki Youl Yang, Dries J. F. Vercruyssen, Kenneth Liddle, Dylan Black, Logan Su, Rahul Trivedi, Yu Miao, Olav Solgaard, Bob Byer, Jelena Vučković, *SPIE Optics + Photonics*, San Diego, CA, Aug. 2019
92. Jelena Vuckovic, *SPIE Optics & Photonics conference on "Quantum Nanophotonics Materials, Devices and Systems*, San Diego, CA August 11-15, 2019
93. Jelena Vuckovic, *Quantum Symposium at the OSA Advanced Photonics Congress*, San Francisco, CA, July 29-Aug. 1, 2019
94. Kiyoul Yang, Jelena Vuckovic, *O5 (Optical Passive Devices and Modules) Conference, OECC/PSC 2019*, Fukuoka, Japan, July 7-11, 2019
95. Logan Su, Jelena Vuckovic, *IEEE Photonics Society, Summer Topical Meeting*, Ft. Lauderdale, Florida, July 8-10, 2019
96. Logan Su, Jelena Vuckovic, special workshop on *Artificial Intelligence in Nanophotonics*, a part of the *International Work-Conference on Artificial Neural Networks (IWANN2019)*, June 12-14, 2019 in Gran Canaria, Canary Islands, Spain

97. Constantin Dory, Jelena Vuckovic, *63rd International Conference on Electron, Ion, and Photon Beam Technology and Nanofabrication (EIPBN)*, Minneapolis, MN, 28-31 May, 2019
98. Jelena Vuckovic, KITP conference *Exploring Open Quantum Systems in Quantum Simulators*, KITP (Kavli Institute for Theoretical Physics), UCSB, CA April 29 - May 3, 2019
99. Constantin Dory, Jelena Vuckovic, “Diamond quantum photonics,” *Symposium EP11 on “Hybrid Materials and Devices for Enhanced Light-Matter Interactions,”* 2019 MRS Spring Meeting & Exhibit, Phoenix, Arizona, April 22 - 26, 2019
100. Logan Su, Jelena Vuckovic, “Design and Optimization for Nanophotonics: Multiscale Techniques” *2019 International Applied Computational Electromagnetics Society (ACES) Symposium*, April 14-18, 2019, Miami, Florida, USA
101. Jelena Vuckovic, *Symposium on “Photonic and Phononic Properties of Engineered Nanostructures” Conference in Optoelectronics 2019 Symposium, Photonics West*, San Francisco, CA, February 2-9, 2019
102. Shuo Sun, Jelena Vuckovic, *49th Winter Colloquium on the Physics of Quantum Electronics (PQE-2019)*, Snowbird, UT, January 6-11, 2019
103. Jelena Vuckovic, *OSA Laser Congress*, Boston, MA, November 4-8, 2018
104. Jelena Vuckovic, *Quantum Science and Engineering, Quantum Materials and Applications Session, 65th Annual AVS International Symposium and Exhibition (AVS 65)*, Oct 21 – Oct 26, 2018 in Long Beach, CA.
105. Jelena Vuckovic, “Connecting quantum systems through optimized photonics,” *Frontiers in Optics/Laser Science (FiO/LS)*, Washington DC, September 2018
106. Jelena Vuckovic, “From Inverse Design to Implementation of Robust and Practical Photonics,” *SPIE Conference on Metamaterials, Metadevices, and Metasystems 2018, Optics & Photonics symposium, Special Session on Engineered Materials for Extreme Optics and Imaging*, San Diego, CA, USA, August 19 - August 23, 2018
107. Jelena Vuckovic, “Connecting quantum systems through optimized photonics,” *Gordon Research Conference on Quantum Science*, Stonehill College, Easton, MA, July 29 - August 3, 2018
108. Jelena Vuckovic, “From Inverse Design to Implementation of Robust Nanophotonics,” *Integrated Photonics Research (IPR) Conference, OSA Advanced Photonics Congress*, ETH Zurich, July 2-5, 2018
109. Jelena Vuckovic, *10th international Quantum Dot Conference – QD2018*, Toronto, ON, Canada, June 25-29, 2018
110. Jelena Vuckovic, “Optimized photonics: from on-chip nonclassical light sources to circuits,” *Conference on Lasers and Electro-Optics (CLEO)*, San Jose, CA, May 14-18, 2018
111. Jelena Vuckovic, *Conference on Challenges in Quantum Information Science (CQIS2018)*, National Institute of Informatics (NII), Tokyo, Japan, April 2018

112. Jelena Vuckovic, *NIM Conference on Resonator QED*, Munich, Germany, August 29 - September 1, 2017
113. Jelena Vuckovic, *ETH 2017 Monte Verita Meeting on "Frontiers in Quantum Nanophotonics,"* Monte Verita, Switzerland, August 20-25, 2017
114. Jelena Vuckovic, "Quantum Nanophotonics," *Metamaterials, Metadevices, and Metasystems Conference, SPIE Nanoscience + Engineering Symposium*, San Diego, CA, Aug. 6-10, 2017
115. Tomas Sarmiento, Jelena Vuckovic, *IEEE Summer Topical Meeting*, San Juan, Puerto Rico, July 2017
116. Jelena Vuckovic, *23th International Conference on Laser Spectroscopy (ICOLS-17)*, Arcachon, France, July 2 - 8, 2017
117. Jelena Vuckovic, "Inverse design and implementation of optical structures" *International Conference on Computation Photography (ICCP 2017)*, Stanford, May 12-14, 2017
118. Kevin Fischer, Jelena Vuckovic, "Quantum nanophotonics," *Symposium on Novel Photonic, Electronic and Plasmonic Phenomena in Materials (ED13), MRS Spring Meeting*, Phoenix, AZ, April 17th - 21st, 2017
119. Linda Zhang, Jelena Vuckovic, "Quantum nanophotonics," *Entangled photon and nonclassical light session, SPIE Defense and Commerce conference*, Anaheim, California, April 9-13, 2017
120. Marina Radulaski, Jelena Vuckovic, "Quantum nanophotonics: from inverse design to implementations," Photonic and Phononic Properties of Engineered Nanostructures" conference in Optoelectronics 2017 Symposium, *Photonics West*, San Francisco, CA, January 28-February 2, 2017 ¹
121. Konstantinos Lagoudakis, Jelena Vuckovic, "Quantum nanophotonics: from inverse design to implementations," *Special Symposium on "Integrated Quantum Photonics," 100th Optical Society of America annual meeting (Frontiers in Optics)*, Rochester, New York on October 17-21, 2016
122. Kai Mueller, Jelena Vuckovic, *Nonlinear Optics and Excitation Kinetics in Semiconductors (NOEKS-13)*, Dortmund, Germany, October 9-13, 2016
123. Jelena Vuckovic, "(Quantum) nanophotonics: from inverse design to implementations," *PECS XII*, University of York, UK, July 18-21 2016
124. Jelena Vuckovic, Workshop on "Attosecond Non-linear Optics", *CLEO/QELS*, San Jose, CA, June, 2016.
125. Kevin Fischer, Jelena Vuckovic, "Strongly Coupled Quantum Dot-Nanocavity Systems" *APS March Meeting*, Baltimore, MD, March 14-18, 2016
126. Jelena Vuckovic, "Low power nonlinear optics in nanophotonic structures," *Frontiers in Optics 2015/Laser Science XXXI (FiO/LS), FiO 6: Quantum Electronics (Nonlinear Optics in Micro/Nano-Optical Structures)*, San Jose, CA, 18-21 October 2015

127. Alexander Piggott, Jelena Vuckovic, "Inverse nanophotonic design," *IEEE Photonics Conference (IPC)*, Reston, VA, 4-8 October 2015
128. Jelena Vuckovic, "Quantum Nanophotonics," *Fundamental Optical Processes in Semiconductors (FOPS)*, Breckenridge, Colorado, August 2-7, 2015
129. Kai Mueller, Jelena Vuckovic, "Quantum Nanophotonics," *META 2015, the 6th International Conference on Metamaterials, Photonic Crystals and Plasmonics*, New York City, 4-7 August 2015
130. Shashank Gupta, Dave Sukhdeo, Jan Petykiewicz, Donguk Nam, Jelena Vuckovic, and Krishna C. Saraswat, "Light Emission from Strain Engineered Germanium for Silicon Compatible Optical Interconnects," *PIERS*, Prague, July 2015
131. Marina Radulaski, Jelena Vuckovic, *Conference on Lasers and Electro-Optics Europe (CLEO/Europe) and the European Quantum Electronics Conference (EQEC)*, Munich, Germany, June 21 - 25, 2015.
132. Jelena Vuckovic, *Atomic Physics Gordon Conference*, Salve Regina University, Newport, RI June 14 - 19, 2015.
133. Jelena Vuckovic, *Photonics North 2015, Special Symposium on Quantum Information with Atoms, Molecules, and Photons*, Ottawa June 9th to 11th, 2015
134. K. G. Lagoudakis, P. L. McMahon, K. Fischer, K. M. Mueller, T. Sarmiento, D. Dalacu, P. J. Poole, M. E. Reimer, V. Zwiller, Y. Yamamoto, and J. Vuckovic, "Coherent control and optical pumping of spins in self-assembled and site-controlled quantum dots," *16th International Conference on Physics of Light-Matter Coupling in Nanostructures (PLMCN)*, Medellin, Colombia February 3-8, 2015
135. Jelena Vuckovic, Alex Piggott, Jesse Lu, "Inverse design and implementation of nanophotonic structures," *SPIE Photonics West, Optoelectronics 2015 Symposium "Photonic and Phononic Properties of Engineered Nanostructures"*, San Francisco, CA, Feb. 7-12, 2015
136. Konstantinos Lagoudakis, Jelena Vuckovic, "Quantum emitters in optical nanocavities: physics and applications," *Innovative Resonator-Emitter Coupled Systems, Frontiers in Optics/Laser Science*, Tucson, AZ, Oct 19-23, 2014
137. Arka Majumdar, Armand Rundquist, Sonia Buckley, Jonghwan Kim, SanfengWu, Michal Bajcsy, Feng Wang, Xiaodong Xu, Jelena Vučković, "Towards few-photon optoelectronics with photonic crystal devices," *Frontiers in Optics/Laser Science*, Tucson, AZ, Oct 19-23, 2014
138. Kai Mueller, Jelena Vuckovic, "Generation of non-classical light on-chip using cavity quantum-electrodynamics," *International Conference of Young Researchers on Advanced Materials (IUMRS-ICYRAM)*, Haikou, China, October 24-27, 2014.
139. Jelena Vuckovic, "Quantum and nonlinear optical devices based on photonic crystal and nanometallic cavities," *Session on "Optical Micro/Nano Resonators and Devices" at IEEE Photonics Conference*, San Diego, CA, October 12-16, 2014

140. Jelena Vuckovic, "Quantum and nonlinear optics at the single photon level with quantum dots in optical nanocavities," *APS March Meeting, Symposium on "Quantum Control of Molecular, Nano, and Plasmonic Materials,"* Denver, CO, March 3-7, 2014
141. Jelena Vuckovic, *Symposium on Quantum Dot and Nanostructures, Photonics West,* San Francisco, February 1 – 6, 2014
142. Thomas Babinec, Jelena Vuckovic, *PQE2014, "Cavity enhanced light-matter interactions,"* Snowbird, UT, January 5-9, 2014
143. Jelena Vuckovic, "Quantum dots in photonic crystal cavities: from quantum optics to nano-lasers and intra-cellular probes," *Frontiers in Optics (FiO),* Orlando, FL, Oct. 2013
144. Tomas Sarmiento, Jelena Vuckovic, *SemiconNano2013, 4th International Workshop on Epitaxial Growth and Fundamental Properties of Semiconductor Nanostructures,* Lake Arrowhead, CA, Oct. 2013
145. Jelena Vuckovic, "Optical nanocavities: from light sources to single cell probes," *IEEE Photonics Conference 2013,* Bellevue, Washington, September 2013
146. Sonia Buckley, Jelena Vuckovic, *Special Symposium on "Nanophotonics and Metamaterials Ideas for Telecoms and Data Processing," European Conference on Optical Communications (ECOC),* London, UK, September 2013
147. Jelena Vuckovic, "Cavity QED with quantum dots in photonic crystals," *Conference on Resonator QED,* Munich, Germany, September 2013
148. Jelena Vuckovic, Arka Majumdar, Michal Bajcsy, Armand Rundquist, "Nonclassical light sources based on quantum dots in optical nanocavities," *Active Photonic Materials V, SPIE Optics and Photonics Congress,* San Diego, CA, August 2013
149. Jan Petykiewicz, Gary Shambat, Bryan Ellis, Tomas Sarmiento, Alexander Piggott, Jelena Vuckovic, "Electrically controlled photonic crystal nanocavity sources and modulators," *IEEE Summer Topical Meeting on Micro- and Nano-Cavity Integrated Photonics,* Waikoloa, Hawaii, July 2013
150. Jelena Vuckovic, "Quantum dots in optical nanocavities: from cavity QED to device applications," *MRS Spring Meeting, Symposium on Resonant Optics in Metallic and Dielectric Structures: Fundamentals and Applications* San Francisco, CA, April 2013
151. Sonia Buckley, Jelena Vuckovic, *SPIE Photonics West,* Conference on "Photonic and Phononic Properties of Engineered Nanostructures," "Nonlinear optics with nW optical powers in photonic crystals," San Francisco, February 2-7, 2013
152. Jan Petykiewicz, Jelena Vuckovic, *SPIE Photonics West,* Conference on "Physics and Simulation of Optoelectronic Devices XXI," "Design of electrically injected lateral PC lasers," San Francisco, February 2-7, 2013
153. Michal Bajcsy, Jelena Vuckovic, *SPIE Photonics West,* Conference on "Advances in Photonics of Quantum Computing, Memory, and Communication VI (OE117)," Session on "Ultra-Low Power Switching in Quantum and Nonlinear Photonics," San Francisco, February 2-7, 2013

154. Jelena Vuckovic, *MRS Fall Meeting, Symposium on Optically Active Nanostructures*, "Quantum dot-photonic crystal based optoelectronic devices operating at the quantum limit," Boston, MA, Nov. 2012
155. Jelena Vuckovic, "Photonic crystal nanocavity lasers and modulators," *IEEE Photonics Conference*, Burlingame, CA, Sept. 23-27, 2012
156. Gary Shambat, Jelena Vuckovic, "Ultrafast photonic crystal single mode LED," *International Conference on Solid State Devices and Materials (SSDM)*, Kyoto, Japan, Sept. 2012
157. Jelena Vuckovic, "Cavity QED and quantum optics with a single quantum dot in a photonic crystal cavity or a photonic molecule," *23rd International Conference on Atomic Physics (ICAP 2012)*, session on "Quantum optics and cavity QED," Ecole Polytechnique, Palaiseau, Paris, July 23-27, 2012
158. Jelena Vuckovic, "Nanophotonics for quantum optics", *OSA Integrated Photonics Research, Silicon and Nano-Photonics (IPR)*, Colorado Springs, Colorado June 17-22, 2012
159. Jelena Vuckovic, Arka Majumdar, Michal Bajcsy, Armand Rundquist, Dirk Englund, Andrei Faraon, "Strong photon-photon and photon – phonon interaction in a coupled quantum dot- photonic crystal nanocavity," *PECS-X*, Santa Fe, New Mexico, June 3–8, 2012
160. Jelena Vuckovic, "Quantum dots in optical nanocavities: from cavity QED to device applications," *7th International Conference on Quantum Dots (QD 2012)*, Santa Fe, New Mexico, USA, May 14 -18, 2012
161. Jelena Vuckovic, "Ultra-low threshold and high speed electrically pumped photonic crystal nanocavity lasers and LEDs," *CLEO*, San Jose, CA, May 2012
162. Jelena Vuckovic, "Quantum dot - nanocavity QED for quantum information processing," Focus session on "Semiconductor-based quantum communication" *Spring meeting of the German Physical Society*, Berlin, Germany, March 2012
163. Jelena Vuckovic, " Strong photon-photon interaction in a coupled quantum dot-photonic crystal nanocavity," *APS March Meeting*, session on "Strongly interacting photons," Boston, MA, Feb-March 2012
164. Jelena Vuckovic, Bryan Ellis, Gary Shambat, Jan Petykiewicz, Marie Mayer, Tomas Sarmiento, Eugene Haller, Jim Harris, "Electrically injected photonic crystal nanolaser," *Novel In-Plane Semiconductor Lasers XI (OE122) Conference*, SPIE Photonics West, San Francisco, CA, Jan 2012
165. Jelena Vuckovic, Arka Majumdar, Alexander Papageorge, Armand Rundquist, Yiyang Gong, Erik Kim, and Michal Bajcsy, "Opto-mechanics and quantum dot-nanocavity QED," *Frontiers in Optics*, San Jose, CA, 16-20 October 2011.
166. Jelena Vuckovic, Bryan Ellis, Gary Shambat, Arka Majumdar, Andrei Faraon, " Ultra-low threshold lasers and modulators based on optical nanocavities," *SPIE Optics and Photonics, Active Photonic Materials IV*, San Diego, CA, Aug 21-25, 2011
167. Jelena Vuckovic, "(Solid state) cavity QED and applications" *Gordon Conference on Atomic Physics*, Mount Snow Resort, West Dover, VT, June 26-July 1, 2011

168. Jelena Vuckovic, "Photonic crystal cavities: from nonlinear optics at a few photons level, to fast, energy efficient information processing" *CLEO Europe - EQEC (Conference on Lasers and Electro-Optics Europe and the European Quantum Electronics Conference)*, Munich, Germany May 22-27, 2011
169. Jelena Vuckovic, "Nonlinear optics in photonic crystal nanocavities: from light sources to quantum photonic interfaces," *Photonic and Phononic Properties of Engineered Nanostructures, Optoelectronics 2011, Photonics West*, San Francisco, CA, 22-27 January 2011
170. Jelena Vuckovic, IEEE 2011 Winter Topical "Low dimensional Nanostructures and Subwavelength Photonics," Keystone, Colorado, Jan 10-12, 2011 [invited tutorial]
171. Jelena Vuckovic, "Silicon nanocavity based light sources," *MRS Fall Meeting*, Boston, November 2010
172. Jelena Vuckovic, "Fast and energy efficient (silicon CMOS compatible) sources and modulators based on photonic crystals," *PECS IX (9th International Conference on Photonic and Electromagnetic Crystal Structures)*, Granada, Spain, Sept. 26-30, 2010.
173. Jelena Vuckovic, Kelley Rivoire, Arka Majumdar, Ilya Fushman, Dirk Englund, Andrei Faraon, "Nonlinear optics (at a single photon level) in photonic crystal nanocavities," *Special Symposium, SIAM Conference on Nonlinear Waves and Coherent Structures (NW10)*, Philadelphia, Pennsylvania, August 16-19, 2010.
174. Jelena Vuckovic, Bryan Ellis, Arka Majumdar, Gary Shambat, Andrei Faraon, and Dirk Englund, "Fast and energy efficient optical switches and modulators based on photonic crystals," *Photonics in Switching 2010 Topical Meeting*, Santa Cruz/Monterey, CA, July 25-29, 2010
175. Jelena Vuckovic, Arka Majumdar, Kelley Rivoire, Erik Kim, Andrei Faraon, Dirk Englund, Ilya Fushman, Hyochul Kim, and Pierre Petroff, "Quantum dot-nanocavity devices for information processing," *OSA IPR-2010 (Integrated Photonics, Silicon and Nano Photonics conference collocated with the OSA Photonics in Switching conference)*, Santa Cruz/Monterey, CA, July 25-29, 2010.
176. Jelena Vuckovic, Arka Majumdar, "Classical and quantum information processing with a single quantum dot in a photonic crystal nanocavity," *The 22nd International Conference on Indium Phosphide and Related Materials (IPRM 2010)*, May 31 - June 4, Takamatsu, Kagawa, Japan
177. Arka Majumdar, Andrei Faraon, Carter Lin, Nicolas Manquest, Dirk Englund, Ilya Fushman, and Jelena Vuckovic, "Quantum and classical information processing with a single quantum dot in photonic crystal cavity," *The 6th International Conference on the Physics of Quantum Dots (QD2010)*, Nottingham, UK. April 25-30, 2010
178. Jelena Vuckovic "Active photonic crystal devices: from switches and modulators controlled with sub-fJ energies, to silicon-based light sources," *SPIE - Photonics West, Photonic and Phononic Crystal Materials and Devices*, San Francisco, CA, Jan. 23-28, 2010
179. Jelena Vuckovic, Andrei Faraon, Arka Majumdar, Carter Lin, Dirk Englund, "Optical manipulation of quantum dot excitons strongly coupled to photonic crystal cavities," *SPIE - Photonics West, Advances in Photonics of Quantum Computing, Memory, and*

Communication III, San Francisco, CA, Jan. 23-28, 2010

180. Jelena Vuckovic, "Quantum dots in photonic crystals: from quantum information processing to ultra-low energy optical switching," *International Conference on Quantum Information and Technology*, National Institute of Informatics, Tokyo, Japan, Dec. 3-5, 2009.
181. Jelena Vučković, Maria Makarova, Yiyang Gong, Selcuk Yerci, Rui Li, Luca Dal Negro, Erbium Doped Silicon Photonic Crystals for Light Sources and Amplifiers, *OSA Frontiers in Optics*, San Jose, CA, Oct. 11-15, 2009
182. Jelena Vuckovic, "Quantum dots in photonic crystals: from quantum information processing to single photon nonlinear optics," *Conference on Quantum Information and Quantum Control (QCIC)*, Fields Institute, University of Toronto, Toronto, CA, Aug. 24-27, 2009
183. Jelena Vuckovic, "Photonic crystal nanocavities: from active nanophotonics, to quantum information processing and nonlinear optics at a single photon level," *DAMOP, Session on Quantum Information with Matter and Light*, University of Virginia, Charlottesville, May 19-23, 2009
184. Jelena Vuckovic, "Photonic crystal nanocavities: from active nanophotonics, to quantum information processing and nonlinear optics at a single photon level" *MRS Spring Meeting, Symposium on "Plasmonics, metamaterials, and light localization,"* San Francisco, CA, April 13-17, 2009
185. Jelena Vuckovic, "Cavity QED in photonic crystals: from quantum information processing to single photon nonlinear optics," *PECS VIII (8th International Photonic & Electromagnetic Crystal Structures Meeting)*, Sydney, Australia, April 5-9th, 2009.
186. Andrei Faraon, Ilya Fushman, Dirk Englund, and Jelena Vuckovic, "Photon blockade in a photonic crystal cavity with a strongly coupled quantum dot," *SPIE Annual Meeting, Photonics West, Symposium on "Advanced Optical Concepts in Quantum Computing, Memory, and Communication II"*, San Jose, CA (Jan. 2009)
187. Dirk Englund, Andrei Faraon, Ilya Fushman, Jelena Vuckovic, "Optical probing and manipulation of single quantum dots in photonic crystal cavities," *SPIE Annual Meeting, Photonics West, Symposium on "Advanced Optical Concepts in Quantum Computing, Memory, and Communication II"*, San Jose, CA, USA, January 2009
188. Jelena Vuckovic, Dirk Englund, Andrei Faraon, Ilya Fushman, and Arka Majumdar "Quantum Dots in Photonic Crystals: from single photon sources to single photon nonlinear optics," *SPIE Annual Meeting, Photonics West, Symposium on single photon sources*, San Jose, CA, USA, January 2009
189. Jelena Vuckovic, Dirk Englund, Andrei Faraon, Ilya Fushman, "Cavity QED, single photon nonlinear optics, and quantum information processing with quantum dots in photonic crystals," *Frontiers in Optics/Laser Science, XXIV annual meeting*, Rochester, NY, Oct. 19-23, 2008
190. Dirk Englund, Jelena Vuckovic, "Classical and quantum light sources based on photonic crystals," *SPIE Optics and Photonics Meeting*, San Diego, Aug. 10-14, 2008
191. Jelena Vuckovic, Andrei Faraon, Ilya Fushman, Dirk Englund, "Controlling photonic crystal cavity reflectivity with a single quantum dot: from quantum information processing to single photon nonlinear optics," *European Materials Research Society (EMRS) Spring Meeting, Symposium on Active materials in photonic crystals for (strong) light matter*

- coupling, Strasbourg, France, May 26-30, 2008
192. Jelena Vuckovic, Dirk Englund, Ilya Fushman, Bryan Ellis, and Hatice Altug, “Ultrafast photonic crystal nanocavity lasers and optical switches,” *SPIE Photonics West Conference*, Conference on “Physics and Simulation of Optoelectronic Devices,” San Jose, CA, Jan. 2008
 193. Jelena Vuckovic, Dirk Englund, Andrei Faraon, Ilya Fushman, Vanessa Sih “Quantum information processing with quantum dots in photonic crystals,” *SPIE Photonics West Conference*, Conference on “Advanced Optical Concepts in Quantum Computing, Memory and Communication,” San Jose, CA, Jan. 2008
 194. Jelena Vuckovic, Dirk Englund, Andrei Faraon, Ilya Fushman, Bryan Ellis, and Hatice Altug “Photonic crystal chips for optical interconnects and quantum information processing,” *SPIE Photonics West Conference*, Conference on “Photonic Crystal Materials and Devices,” San Jose, CA, Jan. 2008
 195. Jelena Vuckovic, Ilya Fushman, Andrei Faraon, Dirk Englund, Bryan Ellis, Yiyang Gong, and Maria Makarova, ”Photonic crystal chips for classical and quantum information processing,” *ISCS (International Symposium on Compound Semiconductors)*, Kyoto, Japan, Oct. 15-18, 2007
 196. Jelena Vuckovic, Ilya Fushman, Andrei Faraon, Dirk Englund, and Bryan Ellis, “Nonlinear optical processes in photonic nanocavities,” *OSA Nonlinear Optics Topical Meeting*, Kona, Hawaii, July 30-August 3 2007
 197. Jelena Vuckovic, Hatice Altug, Dirk Englund, and Bryan Ellis, “Coupled photonic crystal nanocavity arrays,” *CLEO/EUROPE-IQEC 2007*, Munich, Germany, 17 – 22 June 2007
 198. Jelena Vuckovic, Andrei Faraon, Dirk Englund, and Ilya Fushman, “Cavity QED with quantum dots in photonic crystals,” *the 9th Rochester Conference on Coherence and Quantum Optics (CQO9)*, the University of Rochester, the Symposium on quantum optics in mesoscopic condensed matter devices June 10-13, 2007.
 199. Hatice Altug, Dirk Englund and Jelena Vučković, “High Speed Dynamics of Photonic Crystal Nanocavity Laser,” *IEEE LEOS Annual Meeting*, Montreal, Canada, Nov. 2006
 200. Jelena Vuckovic, “Quantum optics and quantum information processing with photonic crystal devices” *APS LS/OSA XXII Meeting (Quantum Optics in Photonic Materials)*, Rochester, NY, Oct. 2006.
 201. Edo Waks, Dirk Englund, Andrei Faraon, Ilya Fushman, Jelena Vuckovic “Nanophotonic devices for quantum information processing,” *Third Feynman Festival*, University of Maryland, August 2006.
 202. Jelena Vuckovic, Dirk Englund, Ilya Fushman, Andrei Faraon, and Edo Waks, “Quantum information processing with quantum dot-photonic crystal devices,” *IEEE/LEOS Summer Topical Meeting on Quantum Information*, Quebec City, Digest. pp. 6-7, Canada, July 2006.
 203. Jelena Vuckovic, Ilya Fushman, Dirk Englund, Andrei Faraon, Edo Waks, “Quantum information processing with quantum dot-photonic crystal devices,” *Conference on Coherent Control of the Fundamental Processes in Optics and X-Ray Optics*, Nizhny Novgorod – Kazan, Russia, June 29-July 4, 2006.

204. Jelena Vuckovic, "Photonic crystal microcavities for classical and quantum information processing," *ICTON06 (8th International Conference on Transparent Optical Networks)*, Special Session on Microresonators and Photonic Molecules: Trapping, Harnessing, and Releasing Light, Proceedings pp. 75-76, Nottingham, U.K., June 2006.
205. Jelena Vuckovic, Dirk Englund, Edo Waks, Ilya Fushman, and Andrei Faraon, "Nanophotonic devices for quantum information processing," *CLEO/QELS, Joint CLEO/QELS Session on Enabling Technologies for Quantum Communication*, Long Beach, CA, May 2006.
206. Jelena Vuckovic, Dirk Englund, Hatice Altug, Ilya Fushman, Edo Waks, "Nanophotonic devices for classical and quantum information processing," *NIMS Conference on Photonic Processes in Semiconductor Nanostructures*, Tsukuba, Japan, March 2005.
207. Jelena Vuckovic, Dirk Englund, Hatice Altug, Ilya Fushman, Edo Waks, "Photonic crystal devices for quantum and nanoscale photonics," *SPIE (The International Society for Optical Engineering) Optics East Conference*, Boston, MA, October 2005.
208. Jelena Vuckovic, Dirk Englund, David Fattal, Edo Waks, Bingyang Zhang, Glenn Solomon, Toshihiro Nakaoka, Yasuhiko Arakawa, and Yoshihisa Yamamoto, "Single Photon Source Based on a Quantum Dot in Photonic Crystal," *IQEC/CLEO Pacific Rim*, Tokyo, Japan, July 2005.
209. Edo Waks, Dirk Englund, David Fattal, and Jelena Vuckovic, "Photonic-crystal based single photon source," *SPIE Annual Meeting*, San Diego, CA, July 2005
210. Jelena Vuckovic, "Quantum Dot-Photonic Crystal Devices and Circuits for Quantum Information Processing," *Quantum Communications Research Conference (QCRC)*, Boulder, CO, June 1-3, 2005.
211. Jelena Vuckovic, Dirk Englund, David Fattal, Hatice Altug, Edo Waks, and Yoshihisa Yamamoto, "Photonic Crystal Devices for Quantum and Nanoscale Photonics," *NDSI'05 (Second Conference on Nanoscale Devices and System Integration)*, Houston, Texas, April 4-6, 2005.
212. Jelena Vuckovic, "Photonic Crystal Devices for Quantum and Nanoscale Photonics," *American Physical Society (APS) March Meeting*, Los Angeles, CA, March 2005.
213. Jelena Vuckovic, "Nanophotonic Devices for Quantum Information Science," *Gordon Research Conference on Quantum Information Science*, Ventura, CA, Feb. 2005.
214. Edo Waks, David Fattal, Dirk Englund, Jelena Vuckovic, and Yoshihisa Yamamoto, "Single Photon Generation Using a Single Quantum Dot in a Photonic Crystal Cavity," *Physics of Quantum Electronics 2005*, Snowbird, Utah, Jan. 2005.
215. J. Vuckovic, D. Fattal, D. Englund, E. Waks, C. Santori, G. Solomon, and Y. Yamamoto, "Cavity Enhanced Single Photons From a Quantum Dot," Presented at *SPIE Photonics West, Single Photon Devices Minisymposium*, San Jose, CA, Jan. 2005. Published in *Proc. SPIE*, Vol. 5722, pp. 19-29. 2005.
216. Jelena Vuckovic, David Fattal, Edo Waks, Charles Santori, Dirk Englund, Hatice Altug, and Yoshihisa Yamamoto, "Photonic crystal components for solid-state photonic quantum information systems," *European Materials Research Society (EMRS)*

Annual Meeting, Symposium on Nanophotonic Materials, Strasbourg, France, May 2004.

217. J. Vuckovic, H. Altug, E. Waks, D. Fattal, Y. Yamamoto, and D. Englund "Photonic Crystal Structures With Large Density of Optical States," *CLEO (Conference on Lasers and Electro-Optics), Special Symposium on Nonlinear Optical Lattices*, San Francisco, CA, May 2004.
218. J. Vuckovic, D. Fattal, C. Santori, G. Solomon, and Y. Yamamoto "Cavity Enhanced Single and Entangled Photons From a Quantum Dot," *QELS (Quantum Electronics and Laser Science) Conference*, Baltimore, MD, June 2003.
219. J. Vuckovic, C. Santori, D. Fattal, M. Pelton, G. Solomon, B. Zhang, J. Plant, and Y. Yamamoto, "Single Photons and Entangled Photons From a Quantum Dot," *Proc. IEEE Int'l Electron Devices Meeting (IEDM 2002)*, San Francisco, CA, pp. 87-90, December 2002.
220. J. Vuckovic, T. Yoshie, M. Loncar, H. Mabuchi, and A. Scherer, "Nano-Scale Optical and Quantum Optical Devices Based on Photonic Crystals," *Proc. IEEE Conf. on Nanotechnology (IEEE-NANO 2002)*, Washington, DC, August 26-28, 2002, pp. 319-321, 2002.
221. J. Vuckovic, A. Scherer, M. Loncar, T. Yoshie, O. Painter, "Applications of Photonic Crystals in Lasers and Light Emitting Diodes," *MRS (Materials Research Society) Spring Meeting*, San Francisco, CA, April 2002.
222. J. Vuckovic, M. Loncar, T. Yoshie, M. Armen, J. Williams, H. Mabuchi and A. Scherer, "High-Q Optical Nanocavities in Planar Photonic Crystals," *Proc. SPIE Photonics West (LASE 2002)*, San Jose, CA, January 2002, Vol. 4629, pp. 190-199, 2002.
223. A. Scherer, A. O. Painter, J. Vuckovic, M. Loncar, T. Yoshie, D. Dapkus, I. Kim, and T. Pearsall, "Photonic Crystal Cavities and Waveguides," *Conf. Digest of Device Research Conference (DRC)*, University of Notre Dame, Notre Dame, Indiana, June 2001, pp. 115-118, 2001.
224. J. Vuckovic, M. Loncar, O. Painter, and A. Scherer, "Surface Plasmon Enhanced LED," *CLEO/QELS (Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science)*, San Francisco, CA, May 2000. *Technical Digest, Post-Conference Edition*, Vol. 40, pp. 41-42, and Vol. 39, pp. 123-124, 2002.

SHORT COURSES AT MAJOR INTERNATIONAL CONFERENCES / SUMMER SCHOOLS

225. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications*, *CLEO-QELS*, San Jose, CA, May 2022
226. Jelena Vuckovic, *Institut Langevin's Summer School on "Wave propagation and control in complex media: From order to disorder,"* Cargèse, Corsica, France, June 2021
227. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications*, *CLEO-QELS*, San Jose, CA, May 2021

228. Jelena Vuckovic, *Okinawa School in Physics: Coherent Quantum Dynamics' OIST Graduate University*, Okinawa, Japan, October 2021
229. Dries Verdecruysse, Jelena Vuckovic, 5th Summer School on Silicon Photonics, Ghent University Belgium, June 15-19, 2020
230. Jelena Vuckovic, *NanoQI'19 Summer School on "Nanotechnology meets Quantum Information,"* San Sebastian, Spain, July 22-26, 2019.
231. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications, CLEO-QELS*, San Jose, CA, May 2019
232. Jelena Vuckovic, *Photonics Bootcamp*, Google X, Mountain View, January 2019
233. Jelena Vuckovic, "Single-photon generation, detection and manipulation at the nanoscale," special course on Nanoscale Quantum Optics, *International School of Physics "Enrico Fermi"*, Varenna, Italy, July 23-28 (2018)
234. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications, CLEO-QELS*, San Jose, CA, May 2018
235. Jelena Vuckovic, *Okinawa School in Physics: Coherent Quantum Dynamics' OIST Graduate University*, Okinawa, Japan, September 26 - October 5, 2017
236. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications, CLEO-QELS*, San Jose, CA, May 2017
237. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications, CLEO-QELS*, San Jose, CA, June 2016
238. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications, CLEO-QELS*, San Jose, CA, May 2015
239. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications, CLEO-QELS*, San Jose, CA, May 2014
240. Jelena Vuckovic, *Ecole de Physique des Houches, Quantum Optics and Nanophotonics Summer School*, Les Houches, France, August 2013.
241. Jelena Vuckovic, *Nano-Cavity Quantum Electrodynamics and Applications, CLEO-QELS*, San Jose, CA, May 2013
242. D. Englund, J. Vuckovic, "Silicon Nanophotonics," *Frontiers in Optics/Laser Science, XXIV annual meeting*, Rochester, NY, Oct. 19-23, 2008

INVITED TALKS AT SYMPOSIA, MEETINGS, AND WORKSHOPS

243. Jelena Vuckovic, *International Workshop on Structured Materials and Structured Light*, Majorana Center, Erice, Sicily, Italy, July 3-9, 2022
244. Daniil Lukin, Jelena Vuckovic, *2021 NNCI Etch Symposium*, UPenn, October 2021
245. Jelena Vuckovic, *ARO workshop on "Exploring Novel 3D Nano-Assembly Processes for Photonics"*, Caltech, September 2021

246. Jelena Vuckovic, *Summer School on “Wave propagation and control in complex media: From order to disorder,”* Cargèse, Corsica, France, June 28-30, 2021
247. Jelena Vuckovic, *NSF NNCI/quantum workshop*, April 12-16 2021
248. Jelena Vuckovic, *MPSD Workshop - Light matter hybrids: strong light matter phenomena and cavity-engineering*, Max Planck Institute for the Structure and Dynamics of Matter, Germany, 2021
249. Jelena Vuckovic, *NSF Workshop on The Future of Semiconductors and Beyond*, Feb. 2021
250. Jelena Vuckovic, *Quantum Leap Challenge Institute on Hybrid Quantum Architectures and Networks*, University of Illinois Urbana-Champaign, Nov. 2020
251. Jelena Vuckovic, *16th Annual Spring Symposium of the IEEE SFBA Nanotechnology Council, “Quantum Computing: Nano based Devices, Challenges and Applications,”* November 2020
252. Jelena Vuckovic, *Army Science Planning and Strategy Meetings (ASPSMs)*, Army Research Laboratory, Nov. 2020
253. Jelena Vuckovic, *Workshop on Machine Learning and Optical Systems*, Boston Chapter of IEEE Photonics Society, Oct. 2020
254. Jelena Vuckovic, *IBM Quantum Summit*, September 15-17, 2020
255. Jelena Vuckovic, *Virtual Workshop on Quantum-Enabling Laser Technologies (QELT)*, Quantum Economic Development Consortium (QED-C), September 2020
256. Jelena Vuckovic, *Optical Society of America Incubator Workshop on Flat Optics: Recent Advances and Future Opportunities*, Washington DC, February 2020
257. Jelena Vuckovic, *Stanford Photonics Research Center (SPRC) Workshop on Novel Optics & Photonics Materials for New and Existing High-Volume Applications*, January 15, 2020
258. Jelena Vuckovic, *Quantum Foundry Workshop*, U. Chicago and Argonne National Lab, Discovery Partners Institute, Jan 2020
259. Jelena Vuckovic, *EU-US-Japan International Symposium on Quantum Technology (ISQT)*, Kyoto, Japan, December 16-17, 2019
260. Logan Su, Jelena Vuckovic, *Workshop on Quantum and Topological Nanophotonics (QTN-2019)*, NTU, Singapore, December 12-14, 2019
261. Jelena Vuckovic, *Symposium on 125 Years of Stanford Electrical Engineering*, Stanford University, Nov. 13, 2019
262. Jelena Vuckovic, *AIM Photonics Members Meeting*, Cadence Design Systems, Inc., San Jose, CA, Oct. 2019
263. Jelena Vuckovic, *NSF convergence workshop on quantum simulators*, National Science Foundation, Arlington, VA, Sept. 2019
264. Kiyoul Yang, Jelena Vuckovic, *1st Special Symposium on Silicon Photonic of the Future (SSPhF 2019)*, Silverado Resort and Spa, Napa, California, June 17th – 19th, 2019

265. Jinhie Skarda, Jelena Vuckovic, *2nd North American Workshop on Silicon Photonics for High Performance Computing (SPHPC Workshop)*, Estes Park, Rocky Mountains, CO, May 29-30, 2019
266. Jelena Vuckovic, *Symposium on "Diamond Photonics - Physics, Technologies and Applications"*, EPFL, Lausanne, Switzerland, May 19th- 22nd, 2019
267. Jelena Vuckovic, *System-X Spring Workshop*, Stanford University, May 2019
268. Jelena Vuckovic, *Electronic Materials Symposium*, Stanford University, May 10th 2019
269. Jelena Vuckovic, "Whats Next in Integrated Optics – Hot Topics at CLEO: 2019," *CLEO-QELS*, San Jose, CA, May 2019
270. Jelena Vuckovic, Workshop on “Will quantum computing actually work?!” *CLEO*, San Jose, May 2019
271. Jelena Vuckovic, *ARO workshop on attojoule photonics/optoelectronics, Stanford*, Feb. 28-March 1, 2019
272. Jelena Vuckovic, *Workshop on Emerging Directions and Opportunities in Quantum Science, Kavli Institute for Theoretical Physics (KITP)*, Santa Barbara, Feb 22--24, 2019
273. Jelena Vuckovic, *Photonics for Quantum (PqQ) Workshop*, Rochester Institute of Technology, Rochester, NY, January 23-25, 2019
274. Jelena Vuckovic, *Quantum Physics of the Universe Summit (POTUS)*, Caltech-Google, January 12-14, 2019
275. Jelena Vuckovic, *Workshop on Advanced Data Center Architectures and Technologies*, Stanford, Dec. 2018
276. Marina Radulaski, Jelena Vuckovic, *Workshop on SiC quantum devices*, Royal Society, London, UK, Nov. 2018
277. Jelena Vuckovic, *System-X Fall Conference*, Stanford University, Nov. 2018
278. Jelena Vuckovic, *System-X Spring Conference*, Stanford University, May 2018
279. Shuo Sun, Jelena Vuckovic, *Annual Workshop for the Advanced Light Source Users* Lawrence Berkeley National Laboratory, Berkeley, CA, Oct. 2018
280. Jelena Vuckovic, *Second Meeting of the National Academies AMO2020 Decadal Survey Committee*, Washington, DC on September 19-20, 2018.
281. Jelena Vuckovic, *Industrial Technology Research Institute (ITRI)*, Hsinchu, Taiwan, June 2018
282. Alex Piggott, Jelena Vuckovic, *First North American Workshop on Silicon Photonics for High Performance Computing (SPHPC Workshop)*, Fort Collins, CO, May 17-18 (2018)
283. Jelena Vuckovic, *Symposium on the Latest Achievements in Physics*, on the occasion of the *20 Years of the Foundation Prof. Dr. Marko V. Jaric*, Belgrade, Serbia, March 23-24, 2018
284. Jelena Vuckovic, *BoydFest*, Stanford, March 2nd, 2018

285. Jelena Vuckovic, *Future of Photonics, US Technology Summit*, Huawei, Santa Clara, January 2018
286. Jelena Vuckovic, "Quantum light sources," *Quantum Physics of the Universe Summit (POTUS)*, Caltech-SpaceX, January 12-14, 2018
287. Marina Radulaski, Jelena Vuckovic, 5th international workshop on "Engineering of Quantum Emitter properties" *the Institute for Quantum Computing in Waterloo*, Canada, Dec 13-15, 2017
288. Jelena Vuckovic, "Quantum photonic networks," *NSF-Convergence workshop on Quantum Elements of Secure Communication*, Washington, DC, Dec. 3-5, 2017
289. Jelena Vuckovic, *Arbitrary and Reconfigurable Optics SPRC Workshop*, Stanford, November 2017
290. Jelena Vuckovic, *System-X Fall Conference*, Stanford University, Nov. 2017
291. Jelena Vuckovic, *System-X Spring Conference*, Stanford University, May 2017
292. Jelena Vuckovic, *Starshot Lightsail Workshop, Breakthrough Initiative*, Caltech, Pasadena, Oct. 2017
293. Vuckovic group, invited experimental demo at *Sci Foo (Science Foo Camp)*, Google/O'Reilly Media, Googleplex, Mountain View, CA, August 2017
294. Jelena Vuckovic, *Single Photon Workshop 2017*, Boulder, Colorado, USA, July 31st - August 4th 2017
295. Jelena Vuckovic, *PRACQSYS 17 (Principles and Applications of Control in Quantum Systems)*, University of Washington, Seattle, July 17-20, 2017
296. Shuo Sun, Jelena Vuckovic, *Optical Society of America Incubator Workshop on Integrated Quantum Photonics with Quantum Dots*, Washington, DC, June 18-20, 2017
297. Jelena Vuckovic, *Workshop on Modern Trends in Solid State Quantum Physics*, Institute of Science and Technology (IST), Austria, June 6-8, 2017
298. Jelena Vuckovic, *System-X Fall Conference*, Stanford University, Nov. 2016
299. Jelena Vuckovic, *System-X Conference, plenary sesion*, Stanford University, May 2016
300. Kai Mueller, Jelena Vuckovic, *Workshop on "Light-matter interactions in low dimensions"*, *Institute for Theoretical Atomic, Molecular, and Optical Physics (ITAMP) at the Harvard-Smithsonian Center for Astrophysics*, Cambridge, MA June 29th-July 1st, 2015
301. Marina Radulaski, Jelena Vuckovic, *First International Symposium on SiC Spintronics*, Vadstena, Sweden, June 15-17 (2015)
302. Jelena Vuckovic, *System-X meeting*, May 2015
303. Jelena Vuckovic, *Stanford University Photonics Retreat*, Pacific Grove, CA, on April 10-12, 2015
304. Jelena Vuckovic, *Kick-off workshop of the European Cooperation in Science and Technology (EU COST) Action MP1403 Nanoscale Quantum Optics*, Belgrade, Serbia, April 2015

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305. Tom Babinec, Jelena Vuckovic, *Workshop on Quantum Plasmonics*, Benasque, Spain, March 2015
 306. Jelena Vuckovic, "Quantum technologies," *Systems-X kick-off meeting*, Stanford, CA, Nov. 2014
 307. Jan Petykiewicz and Jelena Vuckovic, "Design and implementation of nanophotonic circuits for communications and biosensing," *CIS Round Table and Review*, Stanford University, CA, May 2014
 308. Jelena Vuckovic, "Coherent control of quantum dots in optical nanocavities," Topical Workshop on "*From atomic to mesoscale: the role of quantum coherence in systems of various complexities*," *Institute for Theoretical Atomic, Molecular, and Optical Physics (ITAMP)*, Cambridge, Massachusetts, USA March 10-12, 2014
 309. Jelena Vuckovic, *PRACQSYS 13 (Principles and Applications of Control in Quantum Systems)*, August 20-23, 2013, Monterey, CA
 310. Armand Rundquist, Arka Majumdar, Michal Bajcsy, Dirk Englund, Andrei Faraon, Erik D. Kim, and Jelena Vuckovic, "Strong photon–photon and photon–phonon interactions in a coupled quantum dot–photonic crystal nanocavity," *The 11th International Workshop on Nonlinear Optics and Excitation Kinetics in Semiconductors (NOEKS 11)*, Stuttgart, Germany, September 23 -27, 2012
 311. Jelena Vuckovic, *2012 Karles Invitational Quantum Information Science and Technology Conference*, Naval Research Laboratory, Washinton DC, Aug 27-28, 2012
 312. Sonia Buckley, Jelena Vuckovic, "Gallium phosphide photonic crystal cavities for enhancing NV center emission," *Frontiers of Diamondoid Science*, Stanford University, Stanford, CA, June 2012.
 313. Gary Shambat, Jelena Vuckovic, *CIS Adcom Meeting*, Stanford University, May 2012
 314. Gary Shambat, Jelena Vuckovic, *CMOS Emerging Technologies Meeting*, Whistler, BC, June 2011
 315. Jelena Vuckovic, "Ultralow threshold electrically injected nanocavity lasers and modulators," *CIS Roundtable and review meeting*, Stanford, CA, May 2011
 316. Erik Kim, Jelena Vuckovic, *Quantum Dot Day*, University of Bristol, Bristol, UK (Jan 10, 2010)
 317. Jelena Vuckovic, *EE Centennial at CALTECH*, Caltech, Pasadena, CA, Nov. 5-6, 2010.
 318. Jelena Vuckovic, *CeNS Workshop "Nanosciences – Merging Disciplines"*, at the Venice International University (VIU), Italy, Sept. 20-24, 2010
 319. Jelena Vuckovic, "Photonic crystal nanocavity lasers," *Micro/Nano Laser session at the IEEE Photonics Society Semiconductor Laser Workshop, CLEO/QELS*, San Jose, May, 2010
 320. Jelena Vuckovic, "Nanophotonics for optical interconnects and light sources," *Center for Integrated Systems Round Table and Review*, Stanford University, May 18-19, 2010
 321. Jelena Vuckovic, *Stanford University Photonics Retreat*, Napa, April 2010
 322. Yiyang Gong, Jelena Vuckovic, "Nanophotonic devices for classical and quantum information processing," *NNIN Workshop on "Bridging the gap between theory and*

- experiment: what theoretical approach is most suited to solve real problems in nanotechnology and biology,*” Stanford University, Feb. 2010
323. Jelena Vuckovic, Frontiers in Nanoscale Science and Technology Workshop, Harvard University, Cambridge, MA, May 29-31, 2009
 324. Jelena Vuckovic, “Quantum nanophotonics: from optical switching with aJ control pulses at 10GHz speed, to quantum information processing,” *CIS Roundtable and review meeting*, Stanford, CA, May 2009
 325. Dirk Englund, Jelena Vuckovic, *Nanoscience Winterschool*, St. Anton, Arlberg, Austria, March 1-7, 2009.
 326. Andrei Faraon and Jelena Vuckovic, workshop on Optical approaches to Topological Cluster State Computing, National Institute for Informatics (NII), Tokyo, Japan (Dec. 2008)
 327. Yiyang Gong and Jelena Vuckovic, “Plasmonic enhancement of emission from silicon nanocrystals,” G-COE International Symposium for Young Scientists, Kyoto, Japan, October 2008
 328. Andrei Faraon, Jelena Vuckovic, “Strong light-matter interaction between quantum dots and photonic crystal cavities,” *International Workshop on Fundamentals of Light-Matter Interaction*, Recife, Brazil, October 20-22, 2008
 329. Ilya Fushman, Jelena Vuckovic, “Quantum dots in photonic crystals: from quantum information processing to single photon nonlinear optics,” *Quantum Cairns International Workshop*, Palm Cove, Cairns, Australia, June 30-July 3, 2008.
 330. Dirk Englund, Jelena Vuckovic, "Classical and quantum information processing with quantum dots in photonic crystals," CIPS Annual Meeting, Nanophotonics Session, MIT, Cambridge, MA, May 2008
 331. Andrei Faraon, Jelena Vuckovic, "Classical and quantum information processing using photonic crystals," *Annual Meeting of CUDOS (Centre for Ultrahigh-bandwidth Devices for Optical Systems, an ARC Centre of Excellence)*, Sydney, Australia, Feb. 2008.
 332. Jelena Vuckovic, Dirk Englund, Andrei Faraon, and Ilya Fushman, “Quantum information processing with quantum dots in photonic crystals,” *Stanford Photonics Research Center Annual Meeting*, Stanford University, September 2007
 333. Ilya Fushman and Jelena Vuckovic, “Photonic Crystal Cavities for Quantum and Classical Information Processing,” *Workshop on Physics of Microresonators*, University of North Carolina, Charlotte, NC, June 6-9, 2007
 334. Jelena Vuckovic, “Quantum dot-photonic crystal chips for quantum information processing,” *Workshop on Hybrid approaches to scalable quantum information systems*, ITAMP - Harvard, May 24-27 2007.
 335. Jelena Vuckovic, “Nanophotonic chips for optical interconnects and quantum communication,” *CIS Spring Round Table and Review*, Stanford, May 2007
 336. Jelena Vuckovic, “Nanophotonic chips for optical interconnects and quantum communication,” French-Californian Workshop on Nanophotonics, Stanford March 19th
 337. Jelena Vuckovic, “Photonic crystal chips for classical and quantum information processing,” *Stanford-NEC Day*, Stanford University, Feb. 16 2007.

338. Hatice Altug and Jelena Vuckovic, "Photonic crystal devices for nano- and biophotonics," *NNIN review*, U. of Texas in Austin, Feb. 2006.
339. Jelena Vuckovic, "Photonic Crystal Devices for Optical Interconnects," *MARCO Interconnect Focus Center (IFC) Workshop*, Stanford University, Stanford, CA March 2006.
340. Jelena Vuckovic, "Photonic crystal devices for nanoscale and quantum photonics," *NNIN CIS Round Table and Review Meeting*, Stanford University, Stanford, CA, May 10-11 2005.
341. Jelena Vuckovic, "Photonic crystal devices for quantum and nanoscale photonics," *DARPA Workshop on Frontiers in Quantum Device Engineering*, Los Angeles, CA, Jan. 18-19 2005.
342. Jelena Vuckovic, "Photonic Crystal Devices for Nanophotonics and Quantum Information Processing," *Joint US-Japan Workshop on "Nanophotonics: Beyond the limit of optical technology" (NSF-MEXT Joint Symposium and Public Lecture)*, Tokyo, Japan, October 2004.
343. Jelena Vuckovic, "MURI Center for Photonic Quantum Information Systems," *Advanced Research and Development Activity (ARDA)/Intelligence Technology Innovation Center (ITIC) Quantum Cryptography Research Conference* McLean, VA, Aug.31-Sept. 1, 2004.
344. Jelena Vuckovic, "Photonic crystal devices for nanophotonics and quantum information processing," *Workshop on Mesoscopic Physics, Quantum Optics, and Quantum Information*, Institute for Theoretical Atomic and Molecular Physics, Harvard University, May 2004.
345. Jelena Vuckovic, "Quantum optical devices based on quantum dots in photonic crystals," *International Symposium on Quantum Entanglement*, Stanford University, Stanford, CA, December 2003.
346. Jelena Vuckovic, "Quantum optical devices based on quantum dots in microcavities," *Quantum Enabled Science and Technology (QUEST) Workshop*, Santa Fe, NM, August 2003.
347. Jelena Vuckovic, "Quantum information applications of microcavities," *NSF DARPA Photonics Technology Access Program (PTAP) Optical Microresonators Workshop*, San Diego, CA July 2003.
348. Jelena Vuckovic, "Photonic crystal-based optical and quantum optical devices," *Symposium of the Center for Fundamental Materials Research*, Michigan State University, East Lansing, MI, March 2003.
349. Jelena Vuckovic, "Paradigm shifts in devices for optoelectronics," *CIS Autumn Roundtables and advisory committee meetings*, Stanford University, Stanford, CA, November 2002.
350. Jelena Vuckovic, "Optical and quantum optical devices in photonic crystals: from nanocavities to single-photon sources," *Stanford Photonics Research Center (SPRC) Annual Meeting*, Stanford University, Stanford, CA, September 2002.
351. Jelena Vuckovic, "Single photons and entangled photons from a quantum dot microcavity," *International Symposium on Quantum Entanglement*, College de France, Paris, France, June 2002.

352. Jelena Vuckovic, "Photonic bandgap materials," *CNOM (Center for Nonlinear Optical Materials) Annual Meeting*, Stanford University, Stanford, CA, September 2000.

INVITED COLLOQUIA AND SEMINARS

353. Jelena Vuckovic, *Institute of Optical Science (iOS), Ohio State University* (2021)
354. Jelena Vuckovic, *University of Colorado Boulder Quantum Center (CUbit) Seminar*, CU Boulder, JILA & NIST, December 2021
355. Jelena Vuckovic, *LASSP/AEP seminar*, Cornell University, November 2021
356. Jelena Vuckovic, *Physics Colloquium*, University of Toronto, Canada, October 2021
357. Jelena Vuckovic, *Optics Colloquium*, University of Rochester, October 2021
358. Jelena Vuckovic, Department of Physics and Astronomy Colloquium, *University of New Mexico, Albuquerque*, New Mexico, September 2021
359. Jelena Vuckovic, *USA-Australia Transpacific Colloquium*, Monash University & ARC, August 2021
360. Jelena Vuckovic, *Ginzton Optics and Quantum Electronics (AP483) Seminar*, Stanford, May 2021
361. Jelena Vuckovic, *Stanford-Yale Faculty Speaker Series, Stanford Quantum Computing Association*, May 2021
362. Jelena Vuckovic, *EPFL Physics Institute Seminar*, EPFL, April 2021
363. Jelena Vuckovic, *Physics Colloquium*, MIT, April 2021
364. Jelena Vuckovic, *CREOL Spring 2021 Seminar Series*, CREOL, April 2021
365. Jelena Vuckovic, *Facebook Reality Labs*, Tech Talk, March 2021
366. Jelena Vuckovic, *Max Planck Lecture on Non-equilibrium Quantum Phenomena*, Max Planck Institute for the Structure and Dynamics of Matter, Hamburg, Germany, Feb. 2021
367. Jelena Vuckovic, *Berkeley's Nanoscience and Engineering (NSE) seminar series*, Jan. 2021
368. Jelena Vuckovic, *College of Optical Sciences Colloquium*, University of Arizona, January 2021
369. Jelena Vuckovic, *ACS Photonics Global Webinar*, November 2020
370. Jelena Vuckovic, *Virtual AMO Seminars (VAMOS)*, Oct. 2020
371. Jelena Vuckovic, *EE100 Seminar*, Stanford, Oct. 2020
372. Jelena Vuckovic, *Physics Research at Stanford (Phys290 seminar)*, October 2020
373. Jelena Vuckovic, *IQUIST seminar*, University of Illinois at Urbana-Champaign, October 2020

374. Jelena Vuckovic, Physics Undergraduate Research Seminar, *Stanford University*, July 2020
375. Jelena Vuckovic, *Broadcom*, May 2020
376. Jelena Vuckovic, *MIT RLE's Optics and Quantum Electronics Seminar*, April 2020
377. Jelena Vuckovic, *ECE Distinguished Seminar*, Northwestern University, November 2019
378. Jelena Vuckovic, *Distinguished Lecture Series, Molecular Foundry, Lawrence Berkeley National Laboratory (LBNL)*, Berkeley, CA, May 2019
379. Jelena Vuckovic, *JQI (Joint Quantum Institute) Seminar*, University of Maryland, May 2019
380. Jelena Vuckovic, *LMU-TUM Physics Colloquium*, Ludwig Maximilian University of Munich, and Technical University of Munich, Munich, Germany, April 2019
381. Jelena Vuckovic, *QuTech Colloquium*, Delft, Netherlands, April 2019
382. Jelena Vuckovic, *IQST Seminar*, University of Stuttgart, April 2019
383. Jelena Vuckovic, *COQUS Colloquium*, University of Vienna, Austria, April 2019
384. Jelena Vuckovic, *Max Planck Institute for Quantum Optics Colloquium*, Munich, Germany, March 2019
385. Jelena Vuckovic, *Fellows' Lunch*, Technical University of Munich – Institute for Advanced Study, Munich, Germany, March 2019
386. Jelena Vuckovic, *Apple*, Cupertino, CA, Feb. 2019
387. Jelena Vuckovic, *Joint Quantum Seminar*, Harvard University, January 2019
388. Jelena Vuckovic, *SLAC Colloquium*, SLAC, Stanford, January 2019
389. Jelena Vuckovic, *Corning Research*, Sunnivale, September 2018
390. Jelena Vuckovic, *Palo Alto Research Center (PARC)*, May 2018
391. Jelena Vuckovic, *Tech Talk*, Google X, April 2018
392. Jelena Vuckovic, *Max Planck Institute for Quantum Optics*, Munich, Germany, March 2018
393. Jelena Vuckovic, *PayPal Quantum Computing Series*, February 2018
394. Jelena Vuckovic, *Samsung Silicon Valley Speaker Series*, Samsung, San Jose, February 2018
395. Jelena Vuckovic, *Solid State Devices Seminar Series*, UC Berkeley, October 2017
396. Jelena Vuckovic, *Tech Talk*, Google X, Palo Alto, October 2017
397. Jelena Vuckovic, a short talk on “Quantum photonic technologies,” *Stanford Physics/Applied Physics Colloquium* (Sept. 2017)
398. Jelena Vuckovic, *Schottky Seminar*, Technical University of Munich, June 2017
399. Jelena Vuckovic, *Caltech Materials Research Lecture seminar series*, Caltech, Pasadena, CA, Feb. 22nd, 2017

400. Jelena Vuckovic, *Caltech Silicon Valley Alumni Luncheon*, Palo Alto, CA, Jan. 2017
401. Jelena Vuckovic, *Stanford Materials Science Colloquium*, Stanford, CA, Nov. 2016
402. Jelena Vuckovic, *Joint ITAMP/HQOC Seminar (Institute for Theoretical Atomic Physics/Harvard Quantum Optics Center)*, Harvard, Cambridge, MA, Sep. 2016
403. Jelena Vuckovic, "Inverse design and demonstration of nanophotonic devices," *Mentor Graphics*, Fremont, CA, Mar. 2016
404. Jelena Vuckovic, "Inverse design and demonstration of nanophotonic devices," *Global Foundries*, Santa Clara, CA, Aug 2015
405. Jelena Vuckovic, *Physics Colloquium, University of California San Diego*, La Jolla, CA, February 2015
406. Jelena Vuckovic, *IEEE Seminar, University of Toronto, Canada*, September 2014
407. Jelena Vuckovic, *Physics Colloquium, University of Washington, Seattle, WA*, April 2014
408. Jelena Vuckovic, *Institute for Advanced Studies, Technical University Munich, Germany*, March 2014
409. Jelena Vuckovic, *Knowledge at Noon, EE staff seminar*, Stanford, July 2013
410. Jelena Vuckovic, *Seminar at the University of Nis, Serbia*, May 2013
411. Jelena Vuckovic, *Colloquium at the University of Belgrade, Serbia*, May 2013
412. Jelena Vuckovic, *Seminar at Institute for Physics, Humboldt University, Berlin, Germany*, April 2013
413. Jelena Vuckovic, *Alexander Von Humboldt Lecture, Technical University of Berlin, Berlin, Germany*, April 2013
414. Jelena Vuckovic, *Neils Bohr Institute Seminar, Copenhagen, Denmark* May 2013
415. Jelena Vuckovic, *Schottky Seminar, Technical University Munich, Germany*, April 2013
416. Jelena Vuckovic, "Optical nanocavities with quantum dots: from nano-lasers to bio-probes," *Optics and Quantum Electronics Seminar, MIT*, March 2013
417. Jelena Vuckovic, "Quantum dots in optical nanocavities: from cavity QED to applications," *Physics Colloquim, UC Berkeley*, Oct. 2012
418. Jelena Vuckovic, "Nonlinear optics at the single photon level in optical nanocavities," *Optics and Quantum Electronics Seminar, Ginzton Lab, Stanford University*, Nov. 2011
419. Jelena Vuckovic, " Quantum dots in optical nanocavities: from cavity QED to device applications," *MIT Physics Colloquium*, Nov. 2011
420. Jelena Vuckovic, *IFC e-seminar*, Nov. 2011.
421. Jelena Vuckovic, " Quantum dots in optical nanocavities: from cavity QED to device applications," *Humboldt University, Berlin, Germany*, May 2011

422. Jelena Vuckovic, "Quantum dots in optical nanocavities: from cavity QED to device applications," *Institute Colloquium, Max Planck Institute for Quantum Optics (MPQ)*, Munich-Garching, Germany, May 2011
423. Jelena Vuckovic, "Quantum dots in optical nanocavities: from cavity QED to device applications," *Physics Colloquium, Stanford University*, Stanford, CA, Feb. 15, 2011
424. Jelena Vuckovic, "Quantum dots in nanocavities: from cavity QED to optical switches" *U.C. Berkeley Nanoscale Science and Engineering (NSE) seminars*, Berkeley, October 2010
425. Jelena Vuckovic, *MARCO IFC e-seminar*, May 2010.
426. Jelena Vuckovic, "Quantum dots in photonic crystals for classical and quantum information processing," *U.C. Berkeley, EECS Department*, Photonics and plasmonics seminar, April 2010.
427. Jesse Lu, Jelena Vuckovic, "Inverse design of nanophotonics structures using complementary convex optimization," *U.C. Berkeley, EECS Department*, Photonics and plasmonics seminar, March 2010.
428. Jelena Vuckovic, *Caltech, Materials Research Lectures (MRL)*, March 2010
429. Jelena Vuckovic, Physics Colloquium, *Harvard University*, February 2010.
430. Jelena Vuckovic, "Quantum dots in photonic crystals: from quantum information processing to single photon nonlinear optics," *MIT, Optics and Quantum Electronics Seminar*, Nov. 2008
431. Jelena Vuckovic, "Quantum dots in photonic crystals: from quantum information processing to single photon nonlinear optics," *Harvard – MIT Center for Ultracold Atoms Talk Series*, November 2008
432. Jelena Vuckovic, "Quantum dots in photonic crystals: from quantum information processing to single photon nonlinear optics," *Stanford University, Ginzton Lab Seminar*, April 2008
433. Jelena Vuckovic, "Photonic crystal devices for classical and quantum information processing," *Columbia University, Department of Physics Colloquium*, November 2006.
434. Ilya Fushman and Jelena Vuckovic, "Quantum information processing with quantum dots in photonic crystals," *UC Berkeley, Quantum Computation Seminar*, April 2006.
435. Jelena Vuckovic, "Photonic crystal devices for classical and quantum information processing," *University of Connecticut, Department of Physics, Hascoe Lecture*, April. 2006.
436. Jelena Vuckovic, "Photonic crystal devices for classical and quantum information processing," *Harvard University, Engineering and Applied Science Seminar Series*, March 2006.
437. Jelena Vuckovic, "Photonic crystal devices for classical and quantum information processing," *University of Toronto, Optics and Quantum Optics Seminar*, March 2006.
438. Jelena Vuckovic, "Nanoscale and quantum photonic devices," *Stanford University, Electrical Engineering Graduate Seminar*, February 2006.

439. Jelena Vuckovic, "Generation and manipulation of classical and nonclassical light using photonic crystals," University of California Santa Barbara, *Materials Colloquium*, October 2005.
440. Jelena Vuckovic, "Generation and manipulation of classical and nonclassical light using photonic crystals," Caltech, *Joint EE-AP seminar*, May 2005.
441. Jelena Vuckovic, "Photonic crystal devices for quantum and nanoscale photonics," UC Berkeley, *AMO Seminar*, December 2004.
442. Jelena Vuckovic, "Photonic crystal devices for nanophotonics and quantum information processing," Harvard University, *Joint Atomic Physics Colloquium*, March 2004.
443. Jelena Vuckovic, "Photonic crystals and their applications in optoelectronics and quantum optics," Stanford University, Materials Science and Engineering Department, May 2003.
444. Jelena Vuckovic, "Optical and quantum optical devices based on photonic crystals," Palo Alto Research Center (PARC), February 2003.
445. Jelena Vuckovic, "Quantum optical devices based on photonic crystals," Los Alamos National Laboratory, *Quantum Lunch Seminar Series*, January 2003.
446. Jelena Vuckovic, "Optical and quantum optical devices based on photonic crystals," Princeton University, Electrical Engineering Department, April 2002.
447. Jelena Vuckovic, "Optical and quantum optical devices based on photonic crystals," Stanford University, Electrical Engineering Department, April 2002.
448. Jelena Vuckovic, "Optical and quantum optical devices based on photonic crystals," California Institute of Technology (Caltech), Applied Physics Department, April 2002.
449. Jelena Vuckovic, "Optical and quantum optical devices based on photonic crystals," Massachusetts Institute of Technology (MIT), Electrical Engineering Department, March 2002.
450. Jelena Vuckovic, "Photonic crystals," Stanford University, Applied Physics Department, November 2001.
451. Jelena Vuckovic, "Photonic crystals," University of California San Diego, Electrical Engineering Department, April 2001.

REFEREED CONFERENCE PUBLICATIONS

1. "Quantum control of microwave-to-optical transducers for inhomogeneous broadening compensation," Sattwik Deb Mishra, Rahul Trivedi, Amir H. Safavi-Naeini, and Jelena Vuckovic, *WQED workshop* (2021)
2. "A nanophotonic interface for tin-vacancy spin qubits in diamond," Shahriar Aghaieibodi, Alison E. Rugar, Daniel Riedel, Constantin Dory, Sattwik Deb Mishra, Shuo Sun, Haiyu Lu, Patrick J. McQuade, Zhi-Xun Shen, Nicholas A. Melosh, and Jelena Vučković, *SPIE Optics and Photonics*, San Diego, CA, Aug. 2021

3. “Quantum control of microwave-to-optical transducers for inhomogeneous broadening compensation,” Sattwik Deb Mishra, Rahul Trivedi, Amir H. Safavi-Naeini, and Jelena Vuckovic, *CLEO* (2021)
4. “Inverse-designed Optical Vortex Beam Emitters,” A.D.White, K.Y.Yang, J.Vuckovic, *CLEO* (2021)
5. “Inverse Design of Visible Integrated Photonics for an Ultracold Strontium Optical Clock,” G. Spektor, D. Carlson, Z. Newman, J.L. Skarda, N. Sapra, L. Su, Y.M. Tso, S. Jammi, A. Ferdinand, A. Rakholia, W. Lunden, M. Boyd, K. Srinivasan, C. Ropp, A. Agrawal, V. Aksyuk, J. Vučković, S. B. Papp, *CLEO* (2021)
6. “Inverse-designed optical link for chip-to-chip communication,” K.Y.Yang, A.D.White, F.Ashtiani, L.Chang, G.H.Ahn, A. Netherton, J. Skarda, L.Su, D.Vercruyse, J.MacLean, S.Aghaeimeibodi, J.E.Bowers, F.Aflatouni, J.Vuckovic, *CLEO* (2021)
7. “Inverse Spectral Design of Kerr Microcomb Pulses,” Erwan Lucas, Su-Peng Yu, Geun Ho Ahn, Kiyoul Yang, Jelena Vuckovic, Scott B. Papp, *CLEO* (2021)
8. “Observation of arbitrary topological windings of a non-Hermitian band,” Kai Wang, Avik Dutt, Ki Youl Yang, Casey Wojcik, Jelena Vuckovic, and Shanhui Fan, *CLEO* (2021)
9. “Narrow linewidth tin-vacancy centers in diamond waveguides,” Alison E. Rugar, Shahriar Aghaeimeibodi, Constantin Dory, Haiyu Lu, Patrick J. McQuade, Sattwik Deb Mishra, Shuo Sun, Zhi-Xun Shen, Nicholas A. Melosh, Jelena Vuckovic, *CLEO* (2021)
10. “Narrow linewidth tin-vacancy centers in diamond waveguides,” Alison E. Rugar, Shahriar Aghaeimeibodi, Constantin Dory, Haiyu Lu, Patrick J. McQuade, Sattwik Deb Mishra, Shuo Sun, Zhi-Xun Shen, Nicholas A. Melosh, Jelena Vuckovic, *APS March Meeting* (2021)
11. “Inverse design of on chip microresonator dispersion,” Geun Ho Ahn, Kiyoul Yang, Jinhie Skarda, Rahul Trivedi, Jelena Vuckovic, *Photonics West*, San Francisco, CA, Feb. 2021
12. “Inverse Spectral Design of Kerr Microcomb Pulses,” Erwan Lucas, Su-Peng Yu, Geun Ho An, Kiyoul Yang, Jelena Vuckovic, Scott Papp, *Photonics West*, San Francisco, CA, Feb. 2021
13. “Generation of single-photon and two-photon pulses from a self-assembled quantum dot,” Lukas Hanschke, Kevin Fischer, Jakob Wierzbowski, Stefan Appel, Daniil Lukin, Shuo Sun, Rahul Trivedi, Malte Kremser, Tobias Simmet, Constantin Dory, Jelena Vuckovic, Jonathan Finley and Kai Müller, *QD2020*, Munich, Germany
14. “Towards inverse-designed optical interconnect,” Jinhie Skarda, Kiyoul Yang, Melissa Guidry, Geun Ho Ahn, Jelena Vuckovic, *IEEE Optical Interconnects Conference*, Montreal, Canada, July 2020
15. “Broadband Tuning and Microwave Control of Color Centers in Silicon Carbide,” Alexander D. White, Daniil M. Lukin, Melissa A. Guidry, Rahul Trivedi, and Jelena Vuckovic, *CLEO*, San Jose, CA, June 2020
16. “Inverse-designed optical interconnect based on multimode photonics and mode-division multiplexing,” Ki Youl Yang, Jinhie Skarda, Farshid Ashtiani, Melissa A. Guidry, Avik Dutt, Shanhui Fan, Firooz Aflatouni, and Jelena Vuckovic, *CLEO*, San Jose, CA, June 2020

17. "Inverse design of microresonator dispersion for nonlinear optics," Geun Ho Ahn, Kiyoul Yang, Jinhie Skarda, Jelena Vuckovic, *CLEO*, San Jose, CA, June 2020
18. "Optical parametric oscillation using 4H-SiC-on-insulator nanophotonics," Melissa A. Guidry, Ki Youl Yang, Daniil M. Lukin, Joshua Yang, Jelena Vuckovic, *CLEO*, San Jose, CA, June 2020
19. "Generation of Tin-Vacancy Centers in Diamond via Shallow Ion Implantation and Subsequent Diamond Overgrowth," Alison E. Rugar, Haiyu Lu, Constantin Dory, Shuo Sun, Patrick J. McQuade, Zhi-Xun Shen, Nicholas A. Melosh, and Jelena Vuckovic, *CLEO*, San Jose, CA, June 2020
20. "Towards peta-bit/s optical links," Farshid Ashtiani, Su-Peng Yu, Geun Ho Ahn, Jinhie Skarda, Logan Su, Dries Vercruysee, Ki Youl Yang, Chinmay Shirpurkar, Peter Delfyett, Jelena Vuckovic, Scott B. Papp, and Firooz Aflatouni, *Open Compute Project Global Summit (2020 OCP Global Summit)*, San Jose, CA, March 2020
21. "Control of the Silicon Vacancy in Silicon Carbide via Electric and Magnetic Fields," Daniil Lukin, Melissa Guidry, Shuo Sun, Constantin Dory, Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2020
22. "Second-order Nonlinear Frequency Conversion and Integrated Color Centers in Silicon Carbide Nanophotonics," Melissa Guidry, Daniil Lukin, Kiyoul Yang, Constantin Dory, Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2020
23. "Photon blockade in Tavis Cumming model," Rahul Trivedi, Marina Radulaski, Kevin Fischer, Shanhui Fan and Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2020
24. "Point-coupling Hamiltonian for frequency-independent linear optical devices," Rahul Trivedi, Kevin Fischer, Sattwik Deb Mishra and Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2020
25. "Fundamental limits on performance of electromagnetic devices," Rahul Trivedi, Guillermo Angeris, Logan Su, Shanhui Fan and Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2020
26. "Site-controlled generation of tin-vacancy centers in diamond via shallow ion implantation and subsequent diamond growth," Alison E. Rugar, Haiyu Lu, Constantin Dory, Shuo Sun, Patrick J. McQuade, Zhi-Xun Shen, Nicholas A. Melosh, Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2020
27. "Dispersion engineering with inverse design," Dries Vercruysee, Rahul Trivedi, Neil Saprà, Logan Su, Jelena Vuckovic, *SPIE Photonics West*, San Francisco, February 2020
28. "Inverse design and demonstration of laser driven particle accelerators on chip, Neil V. Saprà, Ki Youl Yang, Dries J. F. Vercruysee, Kenneth Liddle, Dylan Black, Logan Su, Rahul Trivedi, Yu Miao, Olav Solgaard, Bob Byer, Jelena Vučković, *SPIE Photonics West*, San Francisco, February 2020
29. "Nonlinear isolation in an inverse-designed silicon photonic circuit," Ki Youl Yang, Jinhie Skarda, Michele Cotrufo, Geun Ho Ahn, Andrea Alu, and Jelena Vuckovic, *Frontiers in Optics*, Washington, DC, September 2019

30. “Foundry-fabricated inverse designed photonics,” Alexander Y. Piggott, Logan Su, Neil Saprà, Akhilesh Khope, Andy Netherton, John Bowers, and Jelena Vuckovic, *Frontiers in Optics*, Washington, DC, September 2019
31. “Fast and numerically exact metasurface simulation,” Rahul Trivedi, Logan Su, Neil V. Saprà, Seunghoon Han, Shanhui Fan, and Jelena Vuckovic, *Frontiers in Optics, Washington, DC*, September 2019
32. “Dispersion engineering with inverse design,” Dries Vercruyssen, Rahul Trivedi, Neil Saprà, Logan Su, Jelena Vuckovic, *SPIE Optics + Photonics*, San Diego, CA, Aug. 2019
33. “Waveguide-integrated dielectric laser particle accelerators through inverse design,” Neil V. Saprà, Ki Youl Yang, Dries J. F. Vercruyssen, Logan Su, Jelena Vučković, *CLEO*, San Jose, CA, May 2019
34. “Inverse designed Fano resonance in silicon microresonators,” Ki Youl Yang, Jinhie Skarda, Michele Cotrufo, Geun Ho Ahn, Andrea Alu and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2019
35. “Inverse Designed Cavity-Waveguide Couplers,” Jinhie Skarda, Ki Youl Yang, Dries Vercruyssen, Neil V. Saprà, Logan Su, and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2019
36. “Optical Characterization of Single Tin-Vacancy Centers in Diamond Nanopillars,” Alison E. Rugar, Constantin Dory, Shuo Sun, and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2019
37. “Diamond Photonic Circuits,” Constantin Dory, Dries Vercruyssen, Ki Youl Yang, Neil V. Saprà, Alison E. Rugar, Shuo Sun, Daniil M. Lukin, Alexander Y. Piggott, Jingyuan L. Zhang, Marina Radulaski, Konstantinos G. Lagoudakis, Logan Su and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2019
38. “4H-SiC-on-Insulator Platform for Quantum Photonics,” Daniil Lukin, Constantin Dory, Marina Radulaski, Shuo Sun, Sattwik Deb Mishra, Melissa Guidry, Dries Vercruyssen, and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2019
39. “Frequency tunable single-photon emission from a single atomic defect in a solid,” Shuo Sun, Jingyuan Linda Zhang, Kevin A. Fischer, Michael J. Burek, Constantin Dory, Konstantinos G. Lagoudakis, Yan-Kai Tzeng, Marina Radulaski, Yousif Kelaita, Amir Safavi-Naeini, Zhi-Xun Shen, Nicholas A. Melosh, Steven Chu, Marko Loncar and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2019
40. “Lithographically-defined strain control in atomically-thin semiconductors,” Leo Yu, Linda Zhang, Jelena Vuckovic, Tony Heinz, *APS March Meeting*, Boston, MA, March 2019
41. “Optimized Photonic Quantum Hardware in Diamond,” Constantin Dory, Dries Vercruyssen, Ki Youl Yang, Neil V. Saprà, Alison E. Rugar, Shuo Sun, Daniil M. Lukin, Alexander Y. Piggott, Jingyuan L. Zhang, Marina Radulaski, Konstantinos G. Lagoudakis, and Jelena Vuckovic, *APS March Meeting*, Boston, MA, March 2019
42. “4H-SiC-on-insulator platform for quantum photonics with color centers,” Daniil M. Lukin, Constantin Dory, Marina Radulaski, Shuo Sun, Dries Vercruyssen, and Jelena Vuckovic, *APS March Meeting*, Boston, MA, March 2019

43. "Demonstration of Inverse Designed Broadband Cavity-Waveguide Couplers," Jinjie Skarda, Ki Youl Yang, Dries Vercruyssen, Neil V. Saprà, Logan Su, Rahul Trivedi, Alexander Y. Piggott, and Jelena Vučković, *APS March Meeting*, Boston, MA, March 2019
44. "Study of single tin-vacancy centers in diamond," Alison E. Rugar, Shuo Sun, Constantin Dory, Jelena Vuckovic, *APS March Meeting*, Boston, MA, March 2019
45. "Analysis of weakly-driven multi-emitter cQED systems", Rahul Trivedi, Marina Radulaski, Kevin Fisher and Jelena Vuckovic, *APS March Meeting*, Boston, MA, March 2019
46. "4H-SiC-on-insulator platform for quantum photonics," Daniil M. Lukin, Constantin Dory, Marina Radulaski, Shuo Sun, Dries Vercruyssen, and Jelena Vuckovic, *Workshop on SiC quantum devices*, Royal Society, London, UK, Nov. 2018
47. "Cathodoluminescence spectroscopy and transmission electron microscopy imaging of localized quantum emitters in van-der waals materials," Fariah Hayee, Leo Yu, Jingyuan Linda Zhang, Jelena Vuckovic, Tony F. Heinz, Jennifer Dionne, *MRS Fall Meeting*, Boston, MA, November 2018
48. Challenges in simulating beam dynamics of dielectric laser acceleration, U. Niedermayer, A. Adelman, R. Abmann, S. Bettoni, D. S. Black, O. Boine-Frankenheim, P. N. Broaddus, R.L. Byer, M. Calvi, H. Cankaya, A. Ceballos, D. Cesar, B. Cowan, M. Dehler, H. Deng, U. Dorda, T. Egenolf, M. Fakhari, A. Fallahi, S. Fan, E. Ferrari, F. Frei, T. Feurer, J. Harris, I. Hartl, D. Hauenstein, B. Hermann, N. Hiller, T. Hirano, P. Hommelhoff, Y.-C. Huang, Z. Huang, T. W. Hughes, J. Illmer, R. Ischebeck, Y. Jiang, F. Kärtner, W. Kurokawa, T. Langenstien, Y. J. Lee, K. Leedle, F. Lemery, A. Li, C. Lomboss, B. Marchetti, F. Mayet, Y. Miao, A. Mittelbach, P. Musumeci, B. Naranjo, A. Piggott, E. Prat, M. Qi, S. Reiche, L. Rivkin, J. Rosenzweig, N. Saprà, N. Schönenberger, X. Shen, R. Shiloh, E. Skär, E. Simakov, O. Solgaard, L. Su, A. Tafel, S. Tan, J. Vuckovic, Z. Wu, H. Xuan, K. Yang, P. Yousefi, Z. Zhao, J. Zhu, *ICAP 2018*, Key West Floridday Oct 20-24. [plenary]
49. "Generation of single-photon and two-photon pulses from a self-assembled quantum dot," Lukas Hanschke, Kevin Fischer, Jakob Wierzbowski, Stefan Appel, Daniil Lukin, Shuo Sun, Rahul Trivedi, Malte Kremser, Tobias Simmet, Constantin Dory, Jelena Vuckovic, Jonathan Finley and Kai Müller, *International Conference on Integrated Quantum Photonics (ICIQPS)*, Paris, France (October 2018)
50. "Generation of single-photon and two-photon pulses from a quantum two-level system," Lukas Hanschke, Kevin Fischer, Jakob Wierzbowski, Stefan Appel, Daniil Lukin, Shuo Sun, Rahul Trivedi, Malte Kremser, Tobias Simmet, Constantin Dory, Jelena Vuckovic, Jonathan Finley, Kai Mueller, *ICPS (34th International Conference on the Physics of Semiconductors)*, Montpellier, France, August 2018
51. "Generation of pulsed quantum light," Kevin Fischer, Jelena Vuckovic, *Quantum Science Gordon Research Conference*, Stonehill College in Easton, MA, July 29 - August 03, 2018
52. "Quantum dot single photon sources with ultra-low multi-photon probability," Lukas Hanschke, Kevin A. Fischer, Stefan Appel, Daniil Lukin, Jakob Wierzbowski, Shuo Sun, Rahul Trivedi, Jelena Vuckovic, Jonathan J. Finley, and Kai Mueller, *Quantum Nanophotonics, SPIE Optics and Photonics*, San Diego, CA, Aug. 2018

53. "Toward direct structural imaging of solid-state quantum emitters," Fariah Hayee, Leo Yu, Jingyuan Linda Zhang, Jelena Vuckovic, Tony Heinz, Jennifer Dionne, *SPIE Optics and Photonics*, San Diego, Aug. 2018
54. "Enhanced High-Harmonic Generation from an all-dielectric metasurface," Hanzhe Liu, Cheng Guo, Giulio Vampa, Jingyuan Linda Zhang, Tomas Sarmiento, Meng Xiao, Philip H. Bucksbaum, Jelena Vučković, Shanhui Fan, and David A. Reis, *Ultrafast Phenomena Conference*, Hamburg, Germany, 2018
55. "Continuous Angle Beam Steering Using Spatiotemporal Frequency-Comb Control in Dielectric Metasurfaces," Amr Shaltout, Konstantinos Lagoudakis, Jorik van de Groep, Soo Jin Kim, Jelena Vuckovic, Vladimir Shalaev, Mark Brongersma, *CLEO*, San Jose, CA, May 2018
56. "Fabrication Constrained Inverse Design of a 3-channel Wavelength Demultiplexer," Alexander Y. Piggott, Logan Su, Neil V. Saprà, Jan Petykiewicz, and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2018
57. "Fully-automated grating coupler design through adjoint optimization," Logan Su, Rahul Trivedi, Neil V. Saprà, Alexander Y. Piggott, Dries Vercruyse, and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2018
58. "Diamond Color Center Integration with a Silicon Carbide Photonics Platform," Marina Radulaski, Yan-Kai Tzeng, Jingyuan Linda Zhang, Hitoshi Ishiwata, Konstantinos G. Lagoudakis, Constantin Dory, Kevin A. Fischer, Yousif A. Kelaita, Shuo Sun, Peter C. Maurer, Kassem Alassaad, Gabriel Ferro, Zhi-Xun Shen, Nicholas A. Melosh, Steven Chu, Jelena Vuckovic, *CLEO*, San Jose, CA, May 2018
59. "Two-photon bundles from a single two-level system," L. Hanschke, K. A. Fischer, J. Wierzbowski, T. Simmet, C. Dory, J.J. Finley, J. Vučković, K. Müller, *CLEO*, San Jose, CA, May 2018
60. "Quantum dot single photon sources with ultra-low multi-photon error rate," Lukas Hanschke, Kevin A. Fischer, Stefan Appel, Daniil Lukin, Jonathan J. Finley, Jelena Vuckovic, and Kai Müller, *CLEO*, San Jose, CA, May 2018
61. "Enhanced Solid-State High-Harmonic Generation from a Silicon Metasurface," Hanzhe Liu, Cheng Guo, Giulio Vampa, Jingyuan Linda Zhang, Tomas Sarmiento, Meng Xiao, Philip H. Bucksbaum, Jelena Vučković, Shanhui Fan, and David A. Reis, *CLEO*, San Jose, CA, May 2018
62. "Level-set Fabrication Constraints for Gradient-based Optimization of Optical Devices," Dries Vercruyse, Logan Su, Rahul Trivedi, Neil V. Saprà, Alexander Y. Piggott, and Jelena Vučković, *CLEO*, San Jose, CA, May 2018
63. "Spontaneous and Stimulated Emission from Quantum Optical Systems," Rahul Trivedi*, Kevin Fischer, Shanshan Xu, Shanhui Fan and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2018
64. "Strongly Cavity-Enhanced Spontaneous Emission from Silicon-Vacancy Centers in Diamond," Jingyuan Linda Zhang, Shuo Sun, Michael Burek, Constantin Dory, Yan-Kai Tzeng, Kevin A. Fischer, Yousif Kelaita, Konstantinos G. Lagoudakis, Marina Radulaski,

- Zhi-Xun Shen, Nicholas A. Melosh, Steven Chu, Marko Lončar, Jelena Vuckovic, *CLEO*, San Jose, CA, May 2018
65. "Scattering of Coherent Pulses from Quantum-Optical Systems," Kevin A. Fischer, Rahul Trivedi, Vinay Ramasesh, Irfan Siddiqi, Jelena Vučković, *CLEO*, San Jose, CA, May 2018
 66. "Strain-controlled Quantum Dots in Atomically-Thin Semiconductors," Leo Yu, Sven Borghardt, Jingyuan Linda Zhang, Jelena Vuckovic, Tony Heinz, *APS March Meeting*, Los Angeles, California, March 2018
 67. "Stimulated and spontaneous emission from open quantum systems," Rahul Trivedi, Kevin Fisher, Shanshan Xu, Shanhui Fan and Jelena Vuckovic, *APS March Meeting*, Los Angeles, California, March 2018
 68. "Hybrid Diamond-Silicon Carbide Color Center Photonics," Marina Radulaski, Yan-Kai Tzeng, Jingyuan Linda Zhang, Konstantinos G. Lagoudakis, Hitoshi Ishiwata, Constantin Dory, Kevin A. Fischer, Yousif A. Kelaita, Shuo Sun, Peter C. Maurer, Kassem Alassaad, Gabriel Ferro, Zhi-Xun Shen, Nicholas Melosh, Steven Chu and Jelena Vučković, *APS March Meeting*, Los Angeles, California, March 2018
 69. "Enhanced spontaneous emission from quantum dots coupled to metal nano-antennas," A. Regler, A. A. Lyamkina, A. Nolinder, A. K. Bakarov, A. I. Toropov, S. P. Moshchenko, K. Müller, J. Vuckovic, J. J. Finley, and M. Kaniber, *International Conference on Optics of Excitons in Confined Systems (OECS)*, Bath, UK, September 2017
 70. "Nonclassical Light Generation with Tunable Photon Statistics from Strongly Coupled Nanophotonic Systems," Constantin Dory, Kevin A. Fischer, Kai Müller, Konstantinos G. Lagoudakis, Tomas Sarmiento, Armand Rundquist¹, Jingyuan L. Zhang, Yousif Kelaita, Neil V. Saprà, Jelena Vučković, *Quantum Nanophotonics, CSF Conference*, Monte Verità, Aug 20 - Aug 25, 2017
 71. "Color center quantum nanophotonics," Marina Radulaski, Matthias Widmann, Yan-Kai Tzeng, Jingyuan Linda Zhang, Constantin Dory, Konstantinos G. Lagoudakis, Jörg Wrachtrup, Nicholas A. Melosh, Zhi-Xun Shen, Steven Chu, Jelena Vučković, *Quantum Nanophotonics, CSF Conference*, Monte Verità, Aug 20 - Aug 25, 2017
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 74. "Complete Coherent Control of Silicon-Vacancies in Diamond Nanopillars Containing Single Defect Centers", Linda Zhang, Konstantinos Lagoudakis, Jelena Vuckovic, Gordon Research Conference on Quantum Sensing, *Chinese University of Hong Kong*, July 2-8, 2017
 75. "Mollow Triplets with Tunable Interactions in Double Lambda Systems of Individual Hole Spins," K. G. Lagoudakis, K. A. Fischer, T. Sarmiento, P. L. McMahon, M.

Radulaski, J. L. Zhang, Y. Kelaita, C. Dory, K. Müller & J. Vučković, *PLMCN*, Munich, Germany, June 2017

76. “Emission of two-photon pulses from a quantum two-level system,” Kevin A. Fischer, Lukas Hanschke, Jakob Wierzbowski, Tobias Simmet, Constantin Dory, Jonathan J. Finley, Jelena Vuckovic, Kai Mueller, *PLMCN*, Munich, Germany, June 2017
77. “Re-excitation as a Source of Error in Single-Photon Sources Based on Quantum Two-Level Systems,” Kevin A. Fischer, Kai Müller, Konstantinos G. Lagoudakis, Jelena Vučković, *CLEO Europe*, Munich, Germany, June 2017 [poster]
78. “Towards a fully integrated accelerator on a chip,” K. Wooton et al, *Proceedings of the IPAC 2017 (International Particle Accelerators Conference)*, Copenhagen, Denmark, May 2017
79. “Effects of Homodyne Interference on Jaynes-Cummings Emission for Single Photon Generation,” Kevin A. Fischer, Yousif A. Kelaita, Neil V. Saprà, Constantin Dory, Konstantinos G. Lagoudakis, Kai Müller, and Jelena Vučković, *CLEO-QELS*, San Jose, CA, May 2017
80. “Tuning the Photon Statistics of a Strongly Coupled Nanophotonic System,” Constantin Dory, Kevin A. Fischer, Kai Müller, Konstantinos G. Lagoudakis, Tomas Sarmiento, Armand Rundquist, Jingyuan L. Zhang, Yousif Kelaita, Neil V. Saprà, and Jelena Vuckovic, *CLEO-QELS*, San Jose, CA, May 2017

Selected as a finalist for the OSA Tingyue Li Innovation Prize

81. “Scalable Quantum Photonics with Single Color Centers in Silicon Carbide,” Marina Radulaski, Matthias Widmann, Matthias Niethammer, Jingyuan Linda Zhang, Sang-Yun Lee, Torsten Rendler, Konstantinos G. Lagoudakis, Nguyen Tien Son, Erik Janzen, Takeshi Ohshima, Jörg Wrachtrup, and Jelena Vučković, *CLEO-QELS*, San Jose, CA, May 2017
82. “Tuning the Photon Statistics of a Strongly Coupled Nanophotonic System,” C. Dory, K A Fischer, K Müller, K G Lagoudakis, T Sarmiento, A Rundquist, J L Zhang, Y Kelaita, N V Saprà, and J Vuckovic, *APS March Meeting*, New Orleans, Louisiana, March 2017
83. “Complete Quantum Control of a Single Silicon-vacancy Center in a Diamond Nanopillar,” J. L. Zhang, K. G. Lagoudakis, Y.-K. Tzeng, C. Dory, M. Radulaski, Y. Kelaita, Z.-X. Shen, N. A. Melosh, S. Chu, J. Vučković, *APS March Meeting*, New Orleans, Louisiana, March 2017

Winner of the Grand Prize at the Maiman Student Paper Competition

84. “Multi-Emitter Cavity Quantum Electrodynamics in Solid State Systems,” Marina Radulaski, Kevin Fischer, Konstantinos Lagoudakis, Linda Zhang, Jelena Vuckovic, *APS March Meeting*, New Orleans, Louisiana, March 2017
85. “Observation of Mollow Triplets with Tunable Interactions in Double Lambda Systems of Individual Hole Spins,” K. G. Lagoudakis, K. A. Fischer, T. Sarmiento, M. Radulaski, L. J. Zhang, P. L. McMahon, Y. Kelaita, C. Dory, K. Müller & J. Vučković, *APS March Meeting*, New Orleans, Louisiana, March 2017

86. “Design grid optimization for OPC of silicon photonics, Wenhui Wang,” Xiaochi Chen, Lei Sun, Alexander Yukio Piggott, Jelena Vuckovic, Jongwook Kye, *SPIE Advanced Litho*, San Jose, February 2017
87. “Observation of Mollow Triplets with Tunable Interactions in Double Lambda Systems of Individual Hole Spins,” K. G. Lagoudakis, K. A. Fischer, T. Sarmiento, M. Radulaski, L. J. Zhang, P. L. McMahon, Y. Kelaita, C. Dory, K. Müller & J. Vučković, *IQC Quantum Inovators Workshop*, Waterloo, Canada, October 2016
88. “Vertical-Substrate MPCVD Epitaxial Diamond Growth,” Yan-Kai Tzeng, Haiyu Lu, Jingyuan Linda Zhang, Hitoshi Ishiwata, Jeremy Dahl, Robert M. K. Carlson, Hao Yan, Peter R. Schreiner, Jelena Vuckovic, Zhi-Xun Shen, Nicholas Melosh, Steven Chu, *MRS Fall Meeting*, Boston, Nov. 2016
89. “Remarkable interplay between strain and parasitic absorption unravelling the best route for Ge based Si-compatible lasing at room temperature,” Shashank Gupta, Jan Petykiewicz, Donguk Nam, David Sukhdeo, Jelena Vuckovic, Krishna Saraswat, *IEEE Photonics Conference (IPC)*, Waikoloa, Hawaii, Oct. 2016
90. “Dramatic and previously overlooked interaction between strain and parasitic absorption in germanium with major implications for Si-compatible lasing,” Shashank Gupta, Jan Petykiewicz, Donguk Nam, David Sukhdeo, Jelena Vuckovic, Krishna Saraswat, *CLEO/QELS*, San Jose, CA, June 2016
91. “Low Strain Silicon-Vacancy Color Centers in Diamond Nanopillar Arrays,” Jingyuan Linda Zhang, Hitoshi Ishiwata, Thomas M. Babinec, Marina Radulaski, Kai Müller, Konstantinos G. Lagoudakis, Constantin Dory, Zhi-Xun Shen, Nicholas A. Melosh, Jelena Vučković, *CLEO/QELS*, San Jose, CA, June 2016
92. “Emitter-Cavity Coupling in Hybrid Silicon Carbide-Nanodiamond Microdisk Resonators,” Marina Radulaski, Yan-Kai Tzeng, Jingyuan Linda Zhang, Hitoshi Ishiwata, Konstantinos Lagoudakis, Veronique Souliere, Gabriel Ferro, Zhi-Xun Shen, Nicholas A. Melosh, Steven Chu, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2016
93. “Inverse Design of a Wavelength Demultiplexer,” Alexander Y. Piggott, Jesse Lu, Konstantinos G. Lagoudakis, Thomas Babinec, Jan Petykiewicz, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2016
94. “Nanocavity-enabled Ultrafast Generation of Highly-indistinguishable Photons,” Kevin A. Fischer, Kai Müller, Constantin Dory, Tomas Sarmiento, Konstantinos G. Lagoudakis, Armand Rundquist, Yousif Kelaita, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2016
95. “Complete Coherent Control of a Strongly Coupled Quantum Dot-Cavity Polariton System,” Constantin Dory, Kevin A. Fischer, Kai Müller, Konstantinos G. Lagoudakis, Tomas Sarmiento, Armand Rundquist, Linda Zhang, Yousif Kelaita, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2016
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97. “Nanocavity-enabled ultrafast generation of highly-indistinguishable photons,” Kevin A. Fischer, Kai Müller, Constantin Dory, Tomas Sarmiento, Konstantinos G. Lagoudakis ^a,

Armand Rundquist, Yousif Kelaita, Jelena Vuckovic, *17th International Conference on Physics of Light-Matter Coupling in Nanostructures (PLMCN17)*, Tokyo, Japan, March 2016

98. “3C-SiC microdisks for visible photonics,” M. Radulaski, T. M. Babinec, J. L. Zhang, S. M. Buckley, Y. A. Kelaita, K. Müller, K. G. Lagoudakis, K. AlAssaad, G. Ferro, J. Vučković, *16th International Conference on Silicon Carbide and Related Materials*, Giardini Naxos, Italy, October 4 - 9, 2015
99. “Strained Ge Nanowire with High-Q Optical Cavity for Ge Laser Applications,” Donguk Nam, Jan Petykiewicz, David S. Sukhdeo, Shashank Gupta, Sonia Buckley, Jelena Vučković and Krishna C. Saraswat, *IEEE Group IV Photonics Conference*, Vancouver, BC, Aug. 2015
100. “Nanophotonics in novel $\chi^{(2)}$ -materials: (111)-GaAs and 3C-SiC,” Marina Radulaski, Sonia M. Buckley, Jingyuan L. Zhang, Jan Petykiewicz, Kai Mueller, Konstantinos G. Lagoudakis, Thomas M. Babinec, Kassem Alassaad, Gabriel Ferro, Klaus Biermann and Jelena Vuckovic, *OSA Nonlinear Optics Topical meeting*, Hawaii, July 2015
Highlight: best student paper and presentation award.
101. “Optical Pumping of Individual Spins in Self-Assembled and Site-Controlled Quantum Dots,” K. G. Lagoudakis, P. L. McMahon, K. Fischer, K. M. Mueller, T. Sarmiento, D. Dalacu, P. J. Poole, M. E. Reimer, V. Zwiller, Y. Yamamoto and J. Vuckovic, *CLEO-QELS*, San Jose, CA, May 2015
102. “Inverse design and implementation of a wavelength demultiplexing grating coupler,” Alexander Y. Piggott, Jesse Lu, Thomas M. Babinec, Konstantinos G. Lagoudakis, Jan Petykiewicz, and Jelena Vuckovic, *CLEO-QELS*, San Jose, CA, May 2015
103. “A novel, highly-strained structure with an integrated optical cavity for a low threshold germanium laser,” Shashank Gupta, Donguk Nam, Jan Petykiewicz, David Sukhdeo, Jelena Vuckovic, Krishna Saraswat, *CLEO-QELS*, San Jose, CA, May 2015
104. “Fluorescent Nanodiamonds from Molecular Diamond Seed,” Hitoshi Ishiwata, Jingyuan Linda Zhang, Robert Edgington, Thomas M. Babinec, Kai Müller, Konstantinos G. Lagoudakis, Nicholas A. Melosh, Zhi-Xun Shen, and Jelena Vučković, *CLEO-QELS*, San Jose, CA, May 2015
105. “Visible Photoluminescence in Cubic (3C) Silicon Carbide Coupled to High Quality Microdisk Resonators,” Marina Radulaski, Thomas M. Babinec, Kai Müller, Konstantinos G. Lagoudakis, Jingyuan Linda Zhang, Sonia Buckley, Yousif A. Kelaita, Kassem Alassaad, Gabriel Ferro and Jelena Vučković, *CLEO-QELS*, San Jose, CA, May 2015
106. “Hybrid diamond-silicon carbide structures incorporating Si-vacancies in diamond as quantum emitters,” Jingyuan Linda Zhang, Hitoshi Ishiwata, Marina Radulaski, Thomas M. Babinec, Kai Mueller, Konstantinos G. Lagoudakis, Gabriel Ferro, Nicholas A. Melosh, Zhi-Xun Shen, Jelena Vuckovic, *CLEO-QELS*, San Jose, CA, May 2015
107. “Towards on-chip generation, routing and detection of non-classical light,” F. Flassig, M. Kaniber, G. Reithmaier, K. Mueller, A. Andrejew, R. Gross, J. Vuckovic and J. J. Finley, *SPIE Photonics West*, San Francisco, CA, Feb. 2015

108. “Non-classical higher-order photon correlations from a solid-state cQED system,” M. Bajcsy, A. Rundquist, A. Majumdar, T. Sarmiento, K. Fischer, K. G. Lagoudakis, S. Buckley, A. Y. Pigott, and J. Vuckovic, *DAMOP*, Madison, WI June 2014
109. “Mimicking Heterostructure Behavior Within a Single Material at Room Temperature Using Strain,” David S. Sukhdeo, Donguk Nam, Ju-Hyung Kang, Jan Petykiewicz, Jae-Hyung Lee, Woo Shik Jung, Jelena Vuckovic, Mark Brongersma, and Krishna C. Saraswat, *CLEO/QELS*, San Jose, CA, June 2014
110. “Photo-oxidative tuning of individual and coupled GaAs,” Photonic Crystal Cavities, Alexander Y. Pigott, Konstantinos G. Lagoudakis, Tomas Sarmiento, Michal Bajcsy, and Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2014
111. “2D-material Based Nano-photonics,” Arka Majumdar, Sanfeng Wu, Sonia Buckley, Aaron M. Jones, Jason S. Ross, Nirmal J. Ghimire, Jiaqiang Yan, David G. Mandrus, Wang Yao, Fariba Hatami, Jelena Vučković, Xiaodong Xu, *CLEO/QELS*, San Jose, CA, June 2014
112. “Below bandgap second harmonic generation in GaAs photonic crystal cavities in (111) and (001) Orientations,” Sonia Buckley, Marina Radulaski, Jan Petykiewicz, Konstantinos Lagoudakis, Klaus Biermann, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2014
113. “Ultrafast Light-Matter Interaction in a Metaphotonic Cavity Containing a Single Quantum Dot,” Kevin A. Fischer, Thomas M. Babinec, Yousif A. Kelaita, Konstantinos G. Lagoudakis, Tomas Sarmiento, Armand Rundquist, Arka Majumdar, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2014
114. “Photonic Crystal Cavities in Cubic Silicon Carbide,” Marina Radulaski, Sonia Buckley, Linda Zhang, Armand Rundquist, Thomas M. Babinec, J. Provine, Kassem Al Assaad, Gabriel Ferro, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2014
115. Marina Radulaski, S. Buckley, L. Zhang, A. Rundquist, T. M. Babinec, J. Provine, K. AlAsaad, G. Ferro, J. Vuckovic, “Photonic crystal cavities in 3C SiC,” *PECS-XI*, Shanghai, China, May 11-15, 2014
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117. “Control of Two-Dimensional Excitonic Light Emission via Photonic Crystal,” Sanfeng Wu, Sonia Buckley, Aaron M. Jones, Jason S. Ross, Nirmal J. Ghimire, Jiaqiang Yan, David G. Mandrus, Wang Yao, Fariba Hatami, Jelena Vuckovic, Arka Majumdar, Xiaodong Xu, *APS March Meeting*, Denver, CO, March 2014
118. “Hybrid metal/dielectric nanocavity for ultrafast quantum dot-optical field interaction,” Kevin A. Fischer, Thomas M. Babinec, Yousif A. Kelaita, Konstantinos G. Lagoudakis, Tomas Sarmiento, Arka Majumdar, Jelena Vuckovic, *APS March Meeting*, Denver, CO, March 2014
119. “Direct Bandgap Germanium Nanowires Inferred from 5.0% Uniaxial Tensile Strain,” David S. Sukhdeo, Donguk Nam, Ju-Hyung Kang, Jan Petykiewicz, Jae Hyung Lee, Woo Shik Jung, Jelena Vuckovic, Mark L. Brongersma and Krishna C. Saraswat, *Group IV Photonics*, Seoul, S. Korea, Aug. 2013

120. “Single-cell Photonic Nanocavity Probes,” Gary Shambat, Sri Rajasekhar Kothapalli, J Provine, Tomas Sarmiento, James Harris, Sanjiv Sam Gambhir and Jelena Vučković, *CLEO/QELS*, San Jose, CA, June 2013
Grand Prize Winner at Maiman Outstanding Student Paper Competition
121. “Zeeman Splitting of Deterministically Charged Quantum Dots Coupled to Photonic Crystal Nanoresonators,” Konstantinos G. Lagoudakis, Kevin Fischer, Arka Majumdar, Armand Rundquist, Michal Bajcsy, Tomas Sarmiento, and Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2013
122. “Photonic crystal coupled cavity arrays for quantum simulation,” Armand Rundquist, Arka Majumdar, Michal Bajcsy, Vaishno D. Dasika, Seth R. Bank, and Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2013
123. “Nonlinear Optics in (111)-GaAs Photonic Crystal Cavities,” Marina Radulaski, Sonia Buckley, Klaus Biermann, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2013
124. “Third-order photon correlations from a quantum dot coupled to a photonic-crystal nanocavity,” Michal Bajcsy, Armand Rundquist, Arka Majumdar, Tomas Sarmiento, Konstantinos G. Lagoudakis, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2013
125. “Electrical Control of Photonic Crystal Cavity by Graphene,” Arka Majumdar, Jonghwan Kim, Feng Wang, and Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2013
126. “Correlated photons in quantum dot-cavity quantum electrodynamics: beyond the single cavity,” Arka Majumdar, Armand Rundquist, Michal Bajcsy, Jelena Vuckovic, *CLEO/QELS*, San Jose, CA, June 2013
127. “Improvement in Photoluminescence of Coimplanted Germanium by Laser Annealing,” Lennon Y. T. Lee, Bruce Adams, Saurabh Chopra, Tomas Sarmiento, Bin Yang, Jan Petykiewicz, Szu-Lin Cheng, Gaurav Thareja, Jelena Vuckovic, and Yoshio Nishi, *ISPEC 2012*, Tokyo, Japan, Dec. 2012
128. “Coupling a single quantum dot to a photonic molecule,” Michal Bajcsy, Arka Majumdar, Armand Rundquist, Jelena Vuckovic, *Frontiers in Optics/Laser Science*, Rochester, NY, October 2012
129. “A New Approach to Ge Lasers with Low Pump Power,” Xiaochi Chen, Yijie Huo, Edward T. Fei, Gary Shambat, Kai Zang, Xi Liu, Yusi Chen, Theodore I. Kamins, Jelena Vuckovic, James S. Harris, *IEEE Photonics Conference*, Burlingame, CA, Sept. 23-27, 2012
130. “Photon blockade with a four-level atom coupled to a microcavity,” M. Bajcsy, A. Majumdar, J. Vuckovic, *DAMOP 2012 Meeting*, Orange County, CA, June 2012
131. “Electrically Driven Photonic Crystal Cavity Devices,” Gary Shambat, Bryan Ellis, Jan Petykiewicz, Marie A. Mayer, Arka Majumdar, Tomas Sarmiento, James Harris, Eugene E. Haller, and Jelena Vučković, *PECS-X: 10th International Symposium on Photonic and Electromagnetic Crystal Structures*, Santa Fe, New Mexico, USA, June 3-June 8, 2012
Best student paper (oral presentation) award
132. “Phonon Mediated Off-resonant Quantum Dot-Cavity Coupling,” Arka Majumdar, Armand Rundquist, Michal Bajcsy, Alexander Papageorge, Erik D. Kim, Jelena Vuckovic,

7th International Conference on Quantum Dots (QD 2012), Santa Fe, NM (May 2012)

133. "Room Temperature Photoluminescence from Ge/SiGe Quantum Well Structure in Microdisk Resonator," Xiaochi Chen, Yijie Huo, Edward T. Fei, Gary Shambat, Xi Liu, Theodore I. Kamins, Jelena Vuckovic, James S. Harris, *Symposium on Photonics and Optoelectronics (SOPO)*, Shanghai, China (May 2012)
134. "Light Emission in Ge Quantum Wells," Edward T. Fei, Yijie Huo, Gary Shambat, Xiaochi Chen, Xi Liu, Stephanie A. Claussen, Elizabeth H. Edwards, Theodore I. Kamins, David B. Miller, Jelena Vuckovic, James S. Harris, *CLEO*, San Jose, CA, May 2012
135. "Off-resonant Coupling Between a Single Quantum Dot and a Nanobeam Photonic Crystal Cavity," Armand Rundquist, Arka Majumdar, and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2012
136. "Multiply Resonant Photonic Crystal Cavities for Nonlinear Frequency Conversion," Sonia Buckley, Kelley Rivoire and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2012
137. "Optical fiber tips functionalized with semiconductor photonic crystal cavities," Gary Shambat, J Provine, Kelley Rivoire, Tomas Sarmiento, James Harris, and Jelena Vučković *CLEO*, San Jose, CA, May 2012
138. "Ultrafast direct modulation of a single-mode photonic crystal nanocavity light-emitting diode," Gary Shambat, Bryan Ellis, Arka Majumdar, Jan Petykiewicz, Marie Mayer, Tomas Sarmiento, James Harris, Eugene Haller, and Jelena Vučković, *CLEO*, San Jose, CA, May 2012
139. "Ultrafast Nonlinear Dynamics in Strongly Coupled Quantum Dot-Cavity system," Arka Majumdar, Dirk Englund, Michal Bajcsy, and Jelena Vuckovic, *CLEO*, San Jose, CA, May 2012
140. "Phonon Mediated off-resonant Quantum Dot-Cavity Interaction," Arka Majumdar, Erik D. Kim, Michal Bajcsy, Armand Rundquist, and Jelena Vuckovic, *APS March Meeting*, Boston, MA, March 2012
141. A.M. Marconnet, T. Kodama, Y. Gong, J. Vuckovic, and K.E. Goodson, "Thermal Conduction in Nanobeam Photonic Crystal Cavities," in *Materials Research Society Symposium*, Boston, MA, 2011.
142. "Second harmonic generation in GaP photonic crystal waveguides," Kelley Rivoire, Sonia Buckley, Fariba Hatami, Jelena Vučković, *IEEE Photonics Society Annual Meeting*, Arlington, VA, Oct. 2011
 Best student paper award - 2nd place
143. "Multi-photon State Generation from Strongly Coupled Quantum Dot-Cavity System," Michal Bajcsy, Arka Majumdar, and Jelena Vuckovic, *Frontiers in Optics*, San Jose, CA, Oct. 2011
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145. "Ge Quantum Well Resonator Modulators," Elizabeth H. Edwards, Ross M. Audet, Edward Fei, Gary Shambat, Rebecca K. Schaevitz, Yiwen Rong, Stephanie A. Claussen, Theodore I. Kamins, Jelena Vuckovic, James S. Harris, and David A. B. Miller, *Proceedings of the IEEE 8th International Conference on Group IV Photonics (GFP)*, pp. 80-82, London, UK, 14-16 Sept. 2011
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147. "Double-layer silicon photonic crystal fiber tip sensor," B. Park, Il Woong Jung, J Provine, G. Shambat, J. Vuckovic, R.T. Howe, O. Solgaard, *Proceedings of the 16th International Conference on Optical MEMS & Nanophotonics (OMN 2011)*, pp. 97-98, Istanbul, Turkey, 8-11 Aug. 2011
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