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Employment

Professor of Optical Engineering Mar. 2019 – present
Kongju National University, Korea

Associate Professor of Optical Engineering Mar. 2014 – Feb. 2019
Kongju National University, Korea

Assistant Professor of Optical Engineering Mar. 2010 – Feb. 2012
Kongju National University, Korea

Postdoctoral Associate in Applied Physics May 2008 – Feb. 2010
Yale University, USA; Advisor: Hui Cao

Senior Research Scientist in Nanophotonics Lab. Nov. 2007 – Apr. 2008
Advanced Photonic Research Institute, Korea

Postdoctoral fellow in College of Natural Science Sep. 2007 – Nov. 2007
Korea Advanced Institute of Science and Technology, Korea

Education

Ph.D. in Physics, **Korea Advanced Institute of Science and Technology** (Korea) 2003 – 2007
Thesis "*Control of the light using photonic crystal slab structure*" Advisor: Yong-Hee Lee

M.S. in Physics**, Korea Advanced Institute of Science and Technology** (Korea) 2001 – 2003
Thesis "*Lasing from slab edge mode of free-standing two dimensional photonic crystals*"
Advisor: Yong-Hee Lee

B.S. in Physics, **Yonsei University** (Korea) 1994 – 2001

Research Interests

Light-matter interaction in nanoscale optical cavities and applications in photonics, metamaterials, metasurface, plasmonics and THz photonics. Current research project: (i) nanophotonics based on periodic or pseudo-periodic structures; (ii) actively controlled metasurface; (iii) design of various functional devices in THz; (iv) Nitride-based light emitting diodes and laser diodes;

Awards and Fellowships

National Science and Technology Graduate Scholarship, KOSEF 2006
Postdoctoral Fellowship in Foreign Country, KOSEF 2009

Professional Activities and Services

Visiting Professor at Agarwal's group in Univ. of Pennsylvania, USA 2016
Visiting Researcher at Wegener's group in Univ. of Karlsruhe, Germany 2007
Director of Institute of the Optical Convergence Application Technology in Kongju National University, Korea 2014 – present
Executive Editor of Current Optics and Photonics (ISSN:2508-7266) 2017 – 2019
Referee for Phys. Rev. Lett., ACS Photonics. Adv. Opt. Mater., Sci. Rep., et. al.
Member of Optical Society of America, Materials Research Society, Korean Physical Society.
Fellow of Optical Society of Korea

Journal Publications - International

1. **J.-K. Yang***, C.-Y. Kim, and M. Lee "High-sensitive TM modes in photonic crystal nanobeam cavity with horizontal air gap for refractive index sensing" Appl. Sci. **9** (5), 967 (2019)

2. H.-S. Yom, **J.-K. Yang***, A. Y. Polyakov, and I.-H. Lee* " Performance of InGaN/GaN Light Emitting Diodes with n-GaN Layer Embedded with SiO_2 Nano-Particles" Appl. Sci. **8** (9), 1574 (2018)

3. D. V. Dao, T. T.D. Nguyen, H.-Y. Song, **J.-K. Yang**, T.-W. Kim, Y.-T. Yu*, and I.-H. Lee* "Ionic liquid-assisted preparation of Ag-CeO_2 nanocomposites and their improved photocatalytic activity" Mater. Des. **159**, 186-194 (2018)

4. S. Liu, J. Wiersig,* W. Sun, Y. Fan, L. Ge, **J.-K. Yang**, S. Xiao,* Q. Song,* and H. Cao "Transporting the Optical Chirality through the Dynamical Barriers in Optical Microcavities" Laser Photonics Rev. **12**, 1800027 (2018)

5. S.-K. Moon, S.-Y. Kwon, J.-H. Yun, I.-H. Lee, and **J.-K. Yang*** "Density effect of Ag/SiO_2 core-shell nanoparticles on optical properties of InGaN/GaN light-emitting diodes" Opt. Eng. **57**, 017111 (2018)

6. J.-H. Yun, K. C. Kim, Y. T. Yu, **J.-K. Yang**, A. Y. Polyakov, and I.-H. Lee* "Ag/SiO_2 nanoparticle-based plasmonic enhancement of light output in nanohole-patterned InGaN/GaN blue light-emitting diodes" Jpn. J. Appl. Phys. **56**, 100305 (2017)

7. I.-S. Lee, I.-B. Sohn, C. Kang, C.-S. Kee, **J.-K. Yang***, and J. W. Lee* "High refractive index metamaterials using corrugated metallic slots", Opt. Express **6**, 6365 (2017)

8. S.-K. Moon, K.-Y. Jeong, H. Noh, and **J.-K. Yang***, "Lasing in an optimized deterministic aperiodic nanobeam cavity", Appl. Phys. Lett. **109**, 241106 (2016)

9. I.-S. Lee, I.-B. Sohn, C. Kang, C.-S. Kee, **J.-K. Yang***, and J. W. Lee*, "Optical isotropy at terahertz frequencies using anisotropic metamaterials", Appl. Phys. Lett. **109**, 031103 (2016)

10. S.-Y. Kwon, S.-K. Moon, C. W. Lee, M. Ebaid, J.-H. Kang, S.-W. Ryu, and **J.-K. Yang***, "Optical Characteristics of Single-Crystal InGaN Nanowires Grown via Metal-Organic Chemical Vapor Deposition with a Ni Catalyst", J. Nanosci. Nanotechnol. **16**, 12967 (2016)

11. S.-Y. Kwon, S.-K. Moon, J.-H. Choi, S.-H. Jang, K.-Y. Jeong, H.-G. Park, and **J.-K. Yang***, "Lasing in optimized two-dimensional iron-nail-shaped rod photonic crystals", AIP Adv. **6**, 035026 (2016)

12. M.-K. Oh*, Y.-S. Shin, C.-L. Lee*, R. De, H. Kang, N. E. Yu, B. H. Kim, J. H. Kim and **J.-K. Yang**, "Morphological and SERS properties of silver nanorod array films fabricated by oblique thermal evaporation at various substrate temperatures", Nanoscale Res. Lett. **10**, 259(2015)

13. M.-S. Song, I.-S. Lee, I.-B. Sohn, C. Kang, C.-S. Kee, **J.-K. Yang**, and J. W. Lee*, "Characteristics of multi-mode resonances in T-shape air slots", AIP Adv. **5**, 047107(2015)

14. L.-W. Jang, H. Park, S.-H. Lee, A. Y. Polyakov, R. Khan, **J.-K. Yang**, and I.-H. Lee*, "Device performance of inverted polymer solar cells with AgSiO2 nanoparticles in active layer", Opt. Express **23**, A211 (2015)

15. S.-K. Moon and **J.-K. Yang***, "Numerical study of polarization-dependent emission properties of localized-surface-plasmon-coupled light emitting diodes with Ag/SiO_2 nanoparticles," J. Opt. Soc. Korea **18**, 582-588 (2014)

16. J.-W. Lee*, **J.-K. Yang***, I.-B. Sohn, H. K. Yoo, C. Kang, and C.-S. Kee, "Monopole resonators in planar plasmonic metamaterials," Opt. Express **22**, 18433-18439 (2014)

17. J.-H. Choi, Y.-S. No, M.-S. Hwang, S.-Y. Kwon, K.-Y. Jeong, S.-H. Kwon, **J.-K. Yang***, and H.-G. Park*, "Low-threshold photonic-band-edge laser using iron-nail-shaped rod array," Appl. Phys. Lett. **104**, 091120 (2014)

18. S.-K. Moon and **J.-K. Yang***, "Numerical study of the photonic-bandgap effect in two-dimensional slab photonic structures with long-range order," J. Opt. **15**, 075704 (2013)

19. J.-W. Lee*, **J.-K. Yang***, I.-B. Sohn, C. Kang, and C.-S. Kee, "Folded slot resonator array with efficient terahertz transmission," Opt. Comm. **293**, 155 (2013)

20. J.-W. Lee*, **J.-K. Yang**, J. E. Kim, I.-B. Sohn, H.-K. Choi, C. Kang, and C.-S. Kee, "Polarization-independent terahertz three-dimensional subwavelength confinement in coupled slot structures," Proc. SPIE **8496**, Terahertz Emitters, Receivers, and Applications III, 849610 (October 15, 2012)

21. J.-W. Lee*, **J.-K. Yang**, I.-B. Sohn, H.-K. Choi, C. Kang and C.-S. Kee, "Relationship between the order of rotation symmetry in perforated apertures and terahertz transmission characteristics," Opt. Eng. **51**, 119002 (2012)

22. L.-W. Jang, D.-W. Jeon, T. Sahoo, A. Y. Polyakov, B. Saravanakumar, Y.-T. Yu, Y.-H. Cho, **J.-K. Yang** and I.-H. Lee*, "Energy coupling processes in InGaN/GaN nanopillar light emitting diodes embedded with Ag and Ag/SiO_2 nanoparticles," J. Mater. Chem. **22**, 21749(2012)

23. K.-Y. Jeong, Y.-H. Lee, H. Cao, and **J.-K. Yang***, "Lasing in localized mode at optimized photonic amorphous structure," Appl. Phys. Lett. **101**, 091101(2012)

24. L.-W. Jang, D.-W. Jeon, M. Kim, J.-W. Jeon, A. Y. Polyakov, J.-W. Ju, S.-J. Lee, J.-H. Baek, **J.-K. Yang**, and I.-H. Lee*, "Investigation of optical and structural stability of localized surface plasmon mediated light-emitting diodes by Ag and Ag/SiO_2 nanoparticles," Adv. Funct. Mater. **22**, 2728-2734 (2012)

25. L.-W. Jang, D.-W. Jeon, T. Sahoo, D.-S. Jo, J.-W. Ju, S.-J. Lee, J.-H. Baek, **J.-K. Yang**, J.-H. Song, A. Y. Polyakov, and I.-H. Lee*, "Localized surface plasmon enhanced quantum efficiency of InGaN/GaN quantum wells by Ag/SiO_2 nanoparticles," Opt. Express, **3**, 2116 (2012)

26. S. F. Liew*, **J.-K. Yang**, H. Noh, C. F. Schreck, E. R. Dufresne, C. S. O'Hern, and H. Cao, "Photonic band gaps in three-dimensional network structures with short-range order," Phys. Rev. A **84**, 063818 (2011)

27. **J-K Yang**, C.-S. Kee, and J. W. Lee*, "Three-dimensional subwavelength confinement of terahertz electromagnetic surface modes in a coupled slit structure," Opt. Express **19**, 20199 (2011)

28. **J-K Yang**, H. Noh, S. F. Liew, M. J. Rooks, G. S. Solomon, and H. Cao*, "Lasing modes in polycrystalline and amorphous photonic structures," Phys. Rev. A **84**, 033820 (2011)

29. H. Noh*, **J.-K. Yang**, S. F. Liew, M. J. Rooks, G. S. Solomon, and H. Cao*, "Photonic network laser," Opt. Lett. **36**, 3560 (2011)

30. **J.-K. Yang**, H. Noh, M. J. Rooks, G. S. Solomon, F. Vollmer, and H. Cao*, "Lasing in localized modes of a slow light photonic crystal waveguide," Appl. Phys. Lett. **98**, 241107 (2011)

31. **J.-K. Yang***,"Extremely high Purcell factor of plasmonic modes in thin nano-metallic cylinders," Jpn. J. Appl. Phys. **50**, 060205 (2011)

32. H. Noh, **J.-K. Yang**, S. V. Boriskina, M. J. Rooks, G. S. Solomon, L. Dal Negro, and H. Cao*, "Lasing in Thue-Morse structures with optimized aperiodicity," Appl. Phys. Lett. **98**, 201109 (2011)

33. H. Noh, **J.-K. Yang**, S.-F. Liew, M. J. Rooks, G. S. Solomon, and H. Cao*, "Control of Lasing in Biomimetic Structures with Short-Range Order," Phys. Rev. Lett. **106**, 183901 (2011)

34. **J.-K. Yang**, S. V. Boriskina, H. Noh, M. J. Rooks, G. S. Solomon, L. Dal Negro*, and H. Cao*, "Demonstration of laser action in a pseudorandom medium," Appl. Phys. Lett. **97**, 223101 (2010).**[Cover issue]**

35. **J.-K. Yang**, C. Schreck, H. Noh, S.-F. Liew, M. I. Guy, C. S. O'Hern, and H. Cao, "Photonic-band-gap effects in two-dimensional polycrystalline and amorphous structures," Phys. Rev. A **82**, 053838 (2010)

36. **J.-K. Yang**, C. Kang, I.-B. Sohn, and C.-S. Kee*, "Effective description of THz localized waveguide resonance through metal film with split ring resonator holes: zero refractive index," Opt. Express **18**, 25371-25378 (2010)

37. H. Noh, **J.-K. Yang**, L. Vitebskiy, A. Figotin, and H. Cao, "Giant resonances near the split band edges of two-dimensional photonic crystals," Phys. Rev. A **82**, 013801 (2010)

38. S.-H. Cho, M.-K. Seo, J.-H. Kang, **J.-K. Yang**, S.-Y. Kang, Y.-H. Lee*, K. H. Hwang, B. D. Lee, J.-G. Lee, Y.-W. Song and J.-H. Lee, "A Black Metal-dielectric Thin Film for High-contrast Displays," J. Kor. Phys Soc. **55**, 501-507 (2009)

39. M.-K. Seo, **J.-K. Yang**, K.-Y. Jeong, H.-G. Park*, F. Qian, H.-S. Ee, Y.-S. No, and Y.-H. Lee, "Modal characteristics in a single-nanowire cavity with a triangular cross section," Nano Lett. **8**, 4534-4538 (2008)

40. **J.-K. Yang***, M.-K. Seo, I.-K. Hwang, S.-B. Kim, and Y.-H. Lee, "Polarization-selective resonant photonic crystal photodetector," Appl. Phys. Lett. **93**, 211103 (2008).

41. M.-K. Seo*, H.-G. Park, **J.-K. Yang**, J.-Y. Kim, S.-H. Kim, and Y.-H. Lee, "Controlled sub-nanometer tuning of photonic crystal resonator by carbonaceous nanodots," Opt. Express **16**, 9829-9837 (2008)

42. **J.-K. Yang***, I.-K. Hwang, M.-K. Seo, S.-H. Kim, and Y.-H. Lee, "Plasmon-suppressed vertically-standing nanometal structures," Opt. Express **16**, 1951-1957 (2008)

43. M.-K. Seo*, K.-Y. Jeong, **J.-K. Yang**, Y.-H. Lee, H.-G. Park, and S.-B. Kim, "Low threshold current single-cell hexapole mode photonic crystal laser," Appl. Phy. Lett. **90**, 171122 (2007)

44. M.-K. Kim*, **J.-K. Yang**, Y.-H. Lee and I.-K. Hwang, "Influence of etching slope on two-dimensional photonic crystal slab resonators," J. Korean Phys. Soc. **50**, 1027-1031 (2007)

45. I.-K. Hwang, S.-K. Kim, **J.-K. Yang**, S.-H. Kim, S. H. Lee, and Y.-H. Lee "Curved-microfiber photon coupling for photonic crystal light emitter," Appl. Phys. Lett. **87**, 131107 (2005)

46. H.-G. Park, S.-H. Kim, S.-H. Kwon, Y.-G. Ju, **J.-K. Yang**, J.-H. Baek, S.-B. Kim, and Y.-H. Lee*, "Electrically Driven Single-Cell Photonic Crystal Laser," Science **305**, 1444 (2004)

47. **J.-K. Yang***, S.-H. Kim, G.-H. Kim, H.-G. Park, Y.-H. Lee, and S.-B. Kim, "Slab-edge modes in two-dimensional photonic crystals," Appl. Phys. Lett. **84**, 3016 (2004)

Journal Publications - Domestic

1. I.-S. Lee, H. S. Shin, J. W. Lee*, and **J.-K. Yang**, "Resonance Properties of L-shaped Slot Structures in the Terahertz Region" New Phys.: Sae Mulli **66**,1366~1370 (2016)

2. J.-R. Ryu, J.-H. Park, and **J.-K. Yang***, "The Characteristics of UV LED Illuminator used for Quality Investigation of Industrial Product," J. Kor. Inst. of Inform. Tech. 14(7), 1-7 (2016)

International Conference Presentations

1. **J.-K. Yang**, "Point-like surface plasmon polariton source from complementary split-ring resonators " in CLEO-PR, Convention center, Hong Kong, F2B.7 (2018)

2. [Invited] S.-K. Moon, K.-Y. Jeong, H. Noh, and **J.-K. Yang***, "Aperiodic Nanolaser" in Progress In Electromagnetics Research Symposium, Nanyang Technological University, Singapore, SC1-2 (2017)

3. S.-Y. Kwon, S.-K. Moon, M. Ebaid, J.-H. Kang, S.-W. Ryu, and **J.-K. Yang***, "Optical Characteristics of Single-Crystal InGaN Nanowires Grown via MOCVD with a Ni Catalyst" in International Workshop on Nitride Semiconductors, Orlando, FL, USA, PS2.159 (2016)

4. S.-Y. Kwon*, S.-K. Moon, M. Ebaid, J.-H. Kang, S.-W. Ryu, and **J.-K. Yang**, "Optical characteristics of MOCVD grown InGaN nanowires with metal catalyst" in ICAE 2015, ICC, Jeju island, South Korea, LM763 (2015)

5. M.-S. Song*, I.-S. Lee, **J.-K. Yang**, and J. W. Lee, "Terahertz multi-mode resonances in T- and Gamma-shaped resonators" in CLEO-PR, Bexco, Busan, South Korea, 27P-2 (2015)

6. S.-K. Moon, K.-Y. Jeong, and **J.-K. Yang***, "Optimized Aperiodic Nanobeam Lasers" in CLEO-PR, Bexco, Busan, South Korea, 26I3-4 (2015)

7. In-Sung Lee*, Jin-Kyu Yang, Chul-Sik Kee, and Joong-Wook Lee, "Mechanisms of high refractive index properties in fish-bone shape structures" in CLEO-PR, Bexco, Busan, South Korea, 25E3-6 (2015)

8. S.-Y. Kwon*, S.-K. Moon, J.-H. Choi, S.-H. Jang, K.-Y. Jeong, H.-G. Park, and **J.-K. Yang** "Lasing in optimized two dimensional iron-nail-shape nanorod photonic crystals" in CLEO/QELS,San Jose, CA, USA, JTu5A.60 (2015)

9. J.-H. Choi*, Y.-S. No, S.-H. Kwon, **J.-K. Yang**, and H.-G. Park, "Low-threshold photonic-band-edge laser using iron-nail-shaped rod array," in CLEO /QELS, San Jose CA USA, SW3G.5 (2014)

10. S.-K. Moon* and **J.-K. Yang**, "Numerical study of polarization dependent quantum efficiency of Ag/SiO_2 core-shell-nanoparticle coated InGaN/GaN light emitting diodes," in 10th ICSN, Washington DC USA, BP2.17 (2013)

11. S.-K. Moon* and **J.-K. Yang**, "Numerical study of effect of number of Ag/SiO2 coreshells on quantum efficiency of InGaN/GaN light emitting diodes," in NanoKorea 2013 Symposium, Seoul Korea, P1302-045 (2013)

12. J.-W. Lee*, **J.-K. Yang**, I.-B. Sohn, C. Kang, and C.-S. Kee, "Relationship between polarization independent terahertz transmission and structural folding angle of slots," in IRMMW-THz, Wollongong Australia, (2012)

13. J.-W. Lee*, **J.-K. Yang**, I.-B. Sohn, C. Kang, and C.-S. Kee, "Polarization independent terahertz three-dimensional subwavelength confinement in coupled slit structures," in SPIE Optics and Photonics, San Diego CA USA, Proc. SPIE 849610 (2012)

14. **J.-K. Yang***, H. Noh, S. V. Boriskina, M. J. Rooks, G. S. Solomon, L. Dal Negro, and H. Cao, "Lasing in Thue-Morse structure with optimal aperiodicity," in CLEO/QELS, San Jose CA USA, QF1H.3 (2012)

15. **J.-K. Yang***, H. Noh, S. F. Liew, M. J. Rooks, G. S. Solomon, and H. Cao, "Lasing modes in polycrystalline and amorphous structures," in CLEO/QELS, San Jose CA USA, CTu2N.6 (2012)

16. H. Noh*, **J.-K. Yang**, S. F. Liew, M. J. Rooks, G. S. Solomon, and H. Cao, "Photonic network laser," in FiO/LS, San Jose CA USA, FWF2 (2011)

17. J. W. Lee*, **J.-K. Yang**, C. Kang, I.-B. Sohn, and C.-S. Kee, "Resonant mode splitting due to the symmetry breaking in a coupled slit structure," in IRMMW-THz, Houston TX USA, M5.33 (2011)

18. J. W. Lee*, **J.-K. Yang**, and C.-S. Kee, "Complicated slit structure for three-dimensional subwavelength confinement of terahertz waves," in SPP5, Busan Korea, MP-141 (2011)

19. S. F. Liew*, **J.-K. Yang**, H. Noh, C. Schreck, C. S. O'Hern, and H. Cao, "Photonic band gap in 3D network structures with short-range order," in CLEO/QELS, Baltimore MD USA, JTul33 (2011)

20. H. Noh*, **J.-K. Yang**, S. F. Liew, C. Schreck, C. S. O'Hern, and H. Cao, "Lasing in amorphous photonic structures," in FiO/LS, Rochester NY USA, PDPB8 (2010)

21. **[Invited]** H. Cao*, **J.-K. Yang**, H. Noh, S. F. Liew, C. Schreck, C. O'Hern, "Evolution of photonic band-gap and lasing from polycrystalline to amorphous photonic structures", in FiO/LS, Rochester NY USA, FWT1 (2010)

22. **[Invited]** **J.-K. Yang**, S. V. Boriskina, H. Noh, M. J. Rooks, G. S. Solomon, L. Dal Negro, and H. Cao*, "Demonstration of laser action in a pseudo-random medium," in SPIE optics photonics : Active Photonic Materials III, San Diego, CA, USA, 7756-01 (2010)

23. H. Noh*, **J.-K. Yang**, A. Figotin, I. Vitebskiy, and H. Cao, "Split band edge resonance in a 2-dimensional square lattice structure," in CLEO/QELS, San Jose CA USA, QFH5 (2010)

24. **J.-K. Yang***, M. J. Rooks, S. Boriskina, S. Glenn, L. Dal Negro, and H. Cao, "Lasing from localized modes in deterministic aperiodic nanostructures," in CLEO/QELS, San Jose CA USA, QTuF2 (2010)

25. **J.-K. Yang***, H. Noh, S. F. Liew, C. Schreck, C. S. O'Hern, and H. Cao, "Photonic band-gap evolution from polycrystalline to amorphous photonic structures," in CLEO/QELS, San Jose CA USA, QMG5 (2010)

26. C.-S. Kee*, **J.-K. Yang**, C. Kang, and J. Lee, "Metamaterials having the nearly-zero effective permittivity and effective permeability simultaneously," in 2nd International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, Pamplona Spain, Poster 15 (2008)

27. **J.-K. Yang***, M.-K. Seo, S.-H. Kim, J.-Y. Kim, and Y.-H. Lee, "Plasmon-free vertically-standing nanometal structure," in 13th MOC '2007, Takamatsu Kagawa Japan, #H81 (2007)

28. M.-K. Seo*, K.-Y. Jeong, **J.-K. Yang**, S.-H. Kim, S.-B. Kim, and Y.-H. Lee, "Electrically-driven single hexapole mode photonic crystal laser using parity-selective mirrors," in LEOS, Florida USA, TuL1 (2007)

29. M.-K. Seo*, K.-Y. Jeong, **J.-K. Yang**, and Y.-H. Lee, "Electrically-driven single-cell hexapole mode photonic crystal laser," in CLEO-PR, Seoul Korea, TuF4_4 (2007)

30. **J.-K. Yang*** and Y.-H. Lee, "Surface plasmon excitation in standing metal-nano-stripe structure," in PECS-VII, Monterey CA USA, #BII-32 (2007)

31. M.-K. Seo*, K.-Y. Jeong, **J.-K. Yang**, and Y.-H. Lee, "Electrically driven photonic crystal single cell cavity structure for low threshold lasing action," in PECS-VII, Monterey CA USA, #BII-5 (2007)

32. M.-K. Kim*, I.-K. Hwang, **J.-K. Yang**, and Y.-H. Lee, "Influence of etching slope on two-dimensional photonic crystal slab resonators," in APOC, Gwangju Korea, Proc. SPIE, 6352, 63520P (2006)

33. **J.-K. Yang***, I.-K. Hwang, S.-H. Kwon, H.-J. Chang and Y.-H. Lee, "Standing metallic nano-stripe array structure," in APOC, Gwangju Korea, Proc. SPIE, 6353, 635334 (2006)

34. I.-K. Hwang*, M.-K. Kim, **J.-K. Yang**, Y.-H. Lee, "All-optical switching in fiber-coupled photonic crystal resonator," in QELS, Long Beach CA USA, QWA3 (2006)

35. **J.-K. Yang***, I.-K. Hwang, S.-H. Kwon, and Y.-H. Lee, "Vertical coupling enhanced Fano-resonance in photonic crystal coupled cavity array," OECC, Seoul Korea, 6E4-1 (2005)

36. **J.-K. Yang***, S.-H. Kwon, I.-K. Hwang, and Y.-H. Lee, "Vertically-coupled Fano resonance in photonic crystal coupled cavity array," PECS-VI, Crete Greece, #52 Poster Session D (2005)

37. Y.-S. Choi*, S.-H. Kim, **J.-K. Yang**, and Y.-H. Lee, "Modified photonic-crystal stick resonators with self-organized InGaAs quantum dots emitting at 1.2 ㎛," 31st ISCS, Seoul Korea (2004)

38. **J.-K. Yang***, S.-H. Kim, G.-H. Kim, H.-G. Park, and Y.-H. Lee, "Lasing from slab edge mode of free-standing two-dimensional photonic crystal," CLEO/QELS, Baltimore USA, CThP4 (2003)