# Hyochul Kim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/11788430/publications.pdf

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|---|---|---|---|
| 41 papers | 1,602 citations | 430874 18 h-index | 377865 34 g-index |
| 41 all docs | 41 docs citations | 41 times ranked | 2254 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Direction control of colloidal quantum dot emission using dielectric metasurfaces. Nanophotonics, 2020, 9, 1023-1030. | 6.0 | 8 |
| 2 | A single-photon switch and transistor enabled by a solid-state quantum memory. Science, 2018, 361, 57-60. | 12.6 | 137 |
| 3 | Cavity-Enhanced Optical Readout of a Single Solid-State Spin. Physical Review Applied, 2018, 9, . | 3.8 | 13 |
| 4 | Metasurface electrode light emitting diodes with planar light control. Scientific Reports, 2017, 7, 14753. | 3.3 | 10 |
| 5 | Nanophotonic Spin-photon Quantum Transistor. , 2017, , . | | 0 |
| 6 | Large Work Function Modulation of Monolayer MoS<sub>2</sub> by Ambient Gases. ACS Nano, 2016, 10, 6100-6107. | 14.6 | 188 |
| 7 | A quantum phase switch between a single solid-state spin and a photon. Nature Nanotechnology, 2016, 11, 539-544. | 31.5 | 129 |
| 8 | Control of the cavity reflectivity using a single quantum dot spin. Proceedings of SPIE, 2015, , . | 0.8 | 1 |
| 9 | A Solid-State Spin-Photon Transistor. , 2015, , . | | 3 |
| 10 | Resonant Interactions between a Mollow Triplet Sideband and a Strongly Coupled Cavity. Physical Review Letters, 2014, 113, 027403. | 7.8 | 41 |
| 11 | Far-field emission profiles from L3 photonic crystal cavity modes. Photonics and Nanostructures - Fundamentals and Applications, 2013, 11, 37-47. | 2.0 | 6 |
| 12 | A quantum logic gate between a solid-state quantum bit and a photon. Nature Photonics, 2013, 7, 373-377. | 31.4 | 138 |
| 13 | Acousto-mechanical tuning of photonic crystal nanocavity modes. , 2013, , . | | 0 |
| 14 | Strain tuning of a quantum dot strongly coupled to a photonic crystal cavity. Applied Physics Letters, 2013, 103, . | 3.3 | 40 |
| 15 | Time domain investigation of radio frequency acousto-mechanical tuning of photonic crystal nanocavity modes. , 2013, , . | | 0 |
| 16 | Optical modes in oxide-apertured micropillar cavities. Optics Letters, 2012, 37, 4678. | 3.3 | 9 |
| 17 | Effect of a nanoparticle on the optical properties of a photonic crystal cavity: theory and experiment. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 698. | 2.1 | 7 |
| 18 | Surface acoustic wave mediated carrier injection into individual quantum post nano emitters. Nanotechnology, 2012, 23, 285201. | 2.6 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Terahertz Ionization of Highly Charged Quantum Posts in a Perforated Electron Gas. Nano Letters, 2012, 12, 1115-1120. | 9.1 | 4 |
| 20 | Surface acoustic wave controlled carrier injection into selfâ€assembled quantum dots and quantum posts. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 407-410. | 0.8 | 1 |
| 21 | Low-Photon-Number Optical Switching with a Single Quantum Dot Coupled to a Photonic Crystal Cavity. Physical Review Letters, 2012, 108, 227402. | 7.8 | 157 |
| 22 | Selective coupling of quantum dot exciton spin states to a photonic crystal cavity using magnetic field tuning. , 2011, , . | | 0 |
| 23 | Strain tuning of quantum dot optical transitions via laser-induced surface defects. Physical Review B, 2011, 84, . | 3.2 | 20 |
| 24 | Strong coupling between two quantum dots and a photonic crystal cavity using magnetic field tuning. Optics Express, 2011, 19, 2589. | 3.4 | 58 |
| 25 | A reversibly tunable photonic crystal nanocavity laser using photochromic thin film. Optics Express, 2011, 19, 5551. | 3.4 | 19 |
| 26 | Dynamic modulation of photonic crystal nanocavities using gigahertz acoustic phonons. Nature Photonics, 2011, 5, 605-609. | 31.4 | 140 |
| 27 | Fast quantum dot single photon source triggered at telecommunications wavelength. Applied Physics Letters, 2011, 98, . | 3.3 | 35 |
| 28 | Magnetic field tuning of a quantum dot strongly coupled to a photonic crystal cavity. Applied Physics Letters, 2011, 98, . | 3.3 | 37 |
| 29 | Permanent tuning of quantum dot transitions to degenerate microcavity resonances. Applied Physics Letters, 2011, 98, 121111. | 3.3 | 17 |
| 30 | Solid-state cavity-QED in polarization-degenerate micropillar cavities. , 2011, , . | | 0 |
| 31 | Enhanced Electro-Optic Phase Modulation in InGaAs Quantum Posts at 1500 nm. IEEE Journal of Quantum Electronics, 2010, 46, 1127-1131. | 1.9 | 3 |
| 32 | Fiber-connectorized micropillar cavities. Applied Physics Letters, 2010, 97, . | 3.3 | 15 |
| 33 | Linewidth broadening of a quantum dot coupled to an off-resonant cavity. Physical Review B, 2010, 82, . | 3.2 | 45 |
| 34 | Differential reflection spectroscopy of a single quantum dot strongly coupled to a photonic crystal cavity. Applied Physics Letters, 2010, 97, 053111. | 3.3 | 6 |
| 35 | Fast Electrical Control of a Quantum Dot Strongly Coupled to a Photonic-Crystal Cavity. Physical Review Letters, 2010, 104, 047402. | 7.8 | 84 |
| 36 | Enhanced Sequential Carrier Capture into Individual Quantum Dots and Quantum Posts Controlled by Surface Acoustic Waves. Nano Letters, 2010, 10, 3399-3407. | 9.1 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Electrically pumped quantum post vertical cavity surface emitting lasers. Applied Physics Letters, 2009, 94, . | 3.3 | 8 |
| 38 | Tuning micropillar cavity birefringence by laser induced surface defects. Applied Physics Letters, 2009, 95, . | 3.3 | 25 |
| 39 | Independent tuning of quantum dots in a photonic crystal cavity. Applied Physics Letters, 2009, 95, . | 3.3 | 17 |
| 40 | Strong coupling through optical positioning of a quantum dot in a photonic crystal cavity. Applied Physics Letters, 2009, 94, . | 3.3 | 112 |
| 41 | Ultrafast optical response of a high-reflectivity GaAsâˆ•AlAs Bragg mirror. Applied Physics Letters, 2005, 86, 031109. | 3.3 | 8 |