

# Kwang-Hyon Kim

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8574297/publications.pdf>

Version: 2024-02-01

45  
papers

619  
citations

687363  
13  
h-index

642732  
23  
g-index

45  
all docs

45  
docs citations

45  
times ranked

479  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Linear and nonlinear optical characteristics of composites containing metal nanoparticles with different sizes and shapes. Optics Express, 2010, 18, 7488.  | 3.4 | 76        |
| 2  | Anapole Resonances Facilitated by High-Index Contrast between Substrate and Dielectric Nanodisk Enhance Vacuum Ultraviolet Generation. ACS Photonics, 2018, 5, 4769-4775.   | 6.6 | 48        |
| 3  | Theory of passive mode locking of solid-state lasers using metal nanocomposites as slow saturable absorbers. Optics Letters, 2012, 37, 1490.  | 3.3 | 44        |
| 4  | High-Q Chiroptical Resonances by Quasi-Bound States in the Continuum in Dielectric Metasurfaces with Simultaneously Broken In-Plane Inversion and Mirror Symmetries. Advanced Optical Materials, 2021, 9, 2101162.  | 7.3 | 37        |
| 5  | Saturable absorption in composites doped with metal nanoparticles. Optics Express, 2010, 18, 21918.   | 3.4 | 33        |
| 6  | Multiband Photonic Topological Valley-Hall Edge Modes and Second-Order Corner States in Square Lattices. Advanced Optical Materials, 2021, 9, 2001865.  | 7.3 | 29        |
| 7  | Theory of passive mode-locking of semiconductor disk lasers in the blue spectral range by metal nanocomposites. Optics Express, 2012, 20, 16174.  | 3.4 | 25        |
| 8  | Low-index dielectric metasurfaces supported by metallic substrates for efficient second-harmonic generation in the blue-ultraviolet range. Physical Chemistry Chemical Physics, 2020, 22, 7300-7305.  | 2.8 | 19        |
| 9  | Slow light in dielectric composite materials of metal nanoparticles. Optics Express, 2012, 20, 25790.   | 3.4 | 17        |
| 10 | Ultrahigh-Q Fano resonance using topological corner modes in second-order pseudospin-Hall photonic systems. Optics and Laser Technology, 2022, 147, 107616.   | 4.6 | 17        |
| 11 | Strongly resonant metasurfaces supported by reflective substrates for highly efficient second- and high-harmonic generations with ultralow pump intensity. Physical Chemistry Chemical Physics, 2019, 21, 19076-19082.  | 2.8 | 16        |
| 12 | Dielectric Chiral Metasurfaces for Second-Harmonic Generation with Strong Circular Dichroism. Annalen Der Physik, 2020, 532, 2000078.   | 2.4 | 15        |
| 13 | Second-Order Photonic Topological Corner States in Square Lattices with Low Symmetry. Annalen Der Physik, 2021, 533, 2100075.   | 2.4 | 15        |
| 14 | Second-Harmonic Generation Based on the Dual-Band Second-Order Topological Corner States. Physica Status Solidi - Rapid Research Letters, 2022, 16, 2100427.  | 2.4 | 15        |
| 15 | Efficient non-perturbative high-harmonic generation from nonlinear metasurfaces with low pump intensity. Optics and Laser Technology, 2021, 135, 106702.  | 4.6 | 14        |
| 16 | Fano resonance by dipole-hexapole coupling in a T-shaped plasmonic nanostructure. Applied Optics, 2015, 54, 2710.   | 1.8 | 13        |
| 17 | Time-domain discrete-dipole approximation for simulation of temporal response of plasmonic nanoparticles. Optics Express, 2015, 23, 15555.  | 3.4 | 13        |
| 18 | Broadband visible-near infrared and deep ultraviolet generation by four-wave mixing and high-order stimulated Raman scattering from the hybrid metasurfaces of plasmonic nanoantennae and Raman-active nanoparticles. Physical Chemistry Chemical Physics, 2019, 21, 26615-26620. | 2.8 | 13        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Asymmetric Second-Harmonic Generation with High Efficiency from a Non-chiral Hybrid Bilayer Complementary Metasurface. <i>Plasmonics</i> , 2021, 16, 77-82.   | 3.4 | 13        |
| 20 | Corner States in 2D Square Lattice Second-Order Photonic Topological Insulators Composed of L-shaped Sublattices. <i>Physica Status Solidi (B): Basic Research</i> , 2021, 258, 2100202.  | 1.5 | 13        |
| 21 | High-order harmonic generation employing field enhancement by metallic fractal rough surfaces. <i>Optics Express</i> , 2011, 19, 20910.   | 3.4 | 10        |
| 22 | Ultrafast Nonlinear Optical Responses of Dielectric Composite Materials Containing Metal Nanoparticles with Different Sizes and Shapes. <i>Plasmonics</i> , 2017, 12, 855-861.  | 3.4 | 10        |
| 23 | Quasi-bound states in the continuum with high $Q$ -factors in metasurfaces of lower-index dielectrics supported by metallic substrates. <i>RSC Advances</i> , 2022, 12, 1961-1967.  | 3.6 | 10        |
| 24 | Theory of plasmonic femtosecond pulse generation by mode-locking of long-range surface plasmon polariton lasers. <i>Optics Express</i> , 2012, 20, 462.   | 3.4 | 9         |
| 25 | Dual Band Second-Order Topological Corner States in 2D Valley-Hall Hexagonal Photonic Crystals. <i>Physica Status Solidi (B): Basic Research</i> , 2022, 259, .   | 1.5 | 9         |
| 26 | Slow and Stopped Light in Active Gain Composite Materials of Metal Nanoparticles: Ultralarge Group Index-Bandwidth Product Predicted. <i>Annalen Der Physik</i> , 2017, 529, 1700103.   | 2.4 | 8         |
| 27 | All-dielectric bilayer complementary metasurfaces supporting quasi-bound states in the continuum induced by intrinsically broken out-of-plane symmetry. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 17242-17249.         | 2.8 | 8         |
| 28 | Proposal for ultrasmall deep ultraviolet diamond Raman nanolaser. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.   | 2.2 | 7         |
| 29 | Unity-Order Nonlinear Optical Index Change in Epsilon-Near-Zero Composite Materials of Gain Media and Metal Nanoparticles. <i>Annalen Der Physik</i> , 2018, 530, 1700259.  | 2.4 | 7         |
| 30 | Efficient Ultraviolet Nanosources Based on Third-Harmonic Generation in Dielectric-Metal Composite Nanodisks. <i>Annalen Der Physik</i> , 2020, 532, 1900383.   | 2.4 | 7         |
| 31 | Parity-time symmetric photonic topological coupled waveguides. <i>Optics and Laser Technology</i> , 2021, 144, 107403.  | 4.6 | 7         |
| 32 | Raman Spaser in a Plasmonic Nanoantenna Embedded with Raman-Active Nanoparticle. <i>Plasmonics</i> , 2017, 12, 1897-1901.   | 3.4 | 6         |
| 33 | Metal-Dielectric Composite Nanostructures for Fano Resonance-Based Highly Sensitive SECARS from Visible to Deep-UV. <i>Journal of Physical Chemistry C</i> , 2018, 122, 16281-16288.  | 3.1 | 6         |
| 34 | Dielectric Materials Containing Active Dielectric-Metal Composite Nanoparticles as Double Negative Materials in the Visible. <i>Plasmonics</i> , 2018, 13, 1741-1748.   | 3.4 | 5         |
| 35 | Slotted metal nanodisks supported by dielectric-coated metallic substrates for ultrahigh enhancement of coherent anti-Stokes and hyper-Raman scattering. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1. | 2.3 | 5         |
| 36 | Dielectric Huygens™ metasurfaces with diverse functionalities in the range from near-UV to deep-UV. <i>Optics Communications</i> , 2021, 493, 126993.   | 2.1 | 4         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Negative Refraction in the Visible and Strong Plasmonic Resonances in Photonic Structures of the Electride Material Mg <sub>2</sub> N. ChemPhysChem, 2020, 21, 1541-1547.   | 2.1 | 3         |
| 38 | The Two-Dimensional Electrides XONa (X=Mg, Ca) as Novel Natural Hyperbolic Materials. ChemPhysChem, 2021, 22, 92-98.  | 2.1 | 3         |
| 39 | High-Harmonic Generation from 2D Monolayer Electrides. Annalen Der Physik, 2022, 534, 2100368.  | 2.4 | 3         |
| 40 | Simultaneous appearance of different topological phases in a single photonic system: coexisting phases characterized by bulk polarization and valley-Chern number enable dual-band second-order topological states. Physica Status Solidi (B): Basic Research, 0, , . | 1.5 | 3         |
| 41 | Epsilon-Negative Active Composites: Loss-Free and Amplifying Plasmonic Materials. Physica Status Solidi (B): Basic Research, 2018, 255, 1700527.  | 1.5 | 2         |
| 42 | Composite-Assisted Phase-Matching: Efficient Wavelength Conversion in Nonlinear Optical Composite Materials Containing Metal Nanoparticles. Annalen Der Physik, 2019, 531, 1800156.   | 2.4 | 2         |
| 43 | Ultrafast Nonlinear Optical Effects of Metal Nanoparticles Composites. , 0, , .   |     | 0         |
| 44 | Dielectric slotted nanodisk laser with ultralow pump threshold by anapole excitation. Applied Physics B: Lasers and Optics, 2020, 126, 1.   | 2.2 | 0         |
| 45 | Second-Order Nonlinear Optical Responses of AlN Two-Dimensional Monolayer: A Real-Time First-Principles Study. ChemPhysChem, 2022, , e202100901.  | 2.1 | 0         |