

# Jer-Shing Huang

## List of Publications by Year in descending order

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81  
papers

3,994  
citations

147801

31  
h-index

114465

63  
g-index

82  
all docs

82  
docs citations

82  
times ranked

5448  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Nanoantennas for visible and infrared radiation. Reports on Progress in Physics, 2012, 75, 024402.   | 20.1 | 736       |
| 2  | Atomically flat single-crystalline gold nanostructures for plasmonic nanocircuitry. Nature Communications, 2010, 1, 150.   | 12.8 | 374       |
| 3  | Impedance Matching and Emission Properties of Nanoantennas in an Optical Nanocircuit. Nano Letters, 2009, 9, 1897-1902.  | 9.1  | 211       |
| 4  | Selective Trapping or Rotation of Isotropic Dielectric Microparticles by Optical Near Field in a Plasmonic Archimedes Spiral. Nano Letters, 2014, 14, 547-552.                                     | 9.1  | 195       |
| 5  | Cross Resonant Optical Antenna. Physical Review Letters, 2009, 102, 256801.  | 7.8  | 179       |
| 6  | Mode Imaging and Selection in Strongly Coupled Nanoantennas. Nano Letters, 2010, 10, 2105-2110.  | 9.1  | 136       |
| 7  | Atomic-Scale Confinement of Resonant Optical Fields. Nano Letters, 2012, 12, 5504-5509.  | 9.1  | 129       |
| 8  | A Comparative Study of Gold Nanocubes, Octahedra, and Rhombic Dodecahedra as Highly Sensitive SERS Substrates. Inorganic Chemistry, 2011, 50, 8106-8111.   | 4.0  | 127       |
| 9  | The influence of shell thickness of Au@TiO <sub>2</sub> core-shell nanoparticles on the plasmonic enhancement effect in dye-sensitized solar cells. Nanoscale, 2013, 5, 7953.                      | 5.6  | 116       |
| 10 | Near-field polarization shaping by a near-resonant plasmonic cross antenna. Physical Review B, 2009, 80, .   | 3.2  | 91        |
| 11 | Facet-Dependent and Light-Assisted Efficient Hydrogen Evolution from Ammonia Borane Using Gold-Palladium Core-Shell Nanocatalysts. Angewandte Chemie - International Edition, 2016, 55, 7222-7226. | 13.8 | 85        |
| 12 | Dynamics of Four-Photon Photoluminescence in Gold Nanoantennas. Nano Letters, 2012, 12, 2941-2947.   | 9.1  | 81        |
| 13 | Facet-dependent optical properties of polyhedral Au-Cu <sub>2</sub> O core-shell nanocrystals. Nanoscale, 2014, 6, 4316.   | 5.6  | 81        |
| 14 | Ultrafast Plasmon Propagation in Nanowires Characterized by Far-Field Spectral Interferometry. Nano Letters, 2012, 12, 45-49.  | 9.1  | 78        |
| 15 | Facet-Dependent and Light-Assisted Efficient Hydrogen Evolution from Ammonia Borane Using Gold-Palladium Core-Shell Nanocatalysts. Angewandte Chemie, 2016, 128, 7338-7342.                        | 2.0  | 78        |
| 16 | Transport and Trapping in Two-Dimensional Nanoscale Plasmonic Optical Lattice. Nano Letters, 2013, 13, 4118-4122.  | 9.1  | 73        |
| 17 | Robust room temperature valley polarization in monolayer and bilayer WS <sub>2</sub> . Nanoscale, 2016, 8, 6035-6042.  | 5.6  | 68        |
| 18 | Plasmon-enhanced photocatalytic hydrogen production on Au/TiO <sub>2</sub> hybrid nanocrystal arrays. Nano Energy, 2016, 27, 412-419.  | 16.0 | 64        |

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|----|--|------|-----------|
| 19 | Deterministic spatiotemporal control of optical fields in nanoantennas and plasmonic circuits. <i>Physical Review B</i> , 2009, 79, .  | 3.2  | 62        |
| 20 | Single-Crystalline Aluminum Nanostructures on a Semiconducting GaAs Substrate for Ultraviolet to Near-Infrared Plasmonics. <i>ACS Nano</i> , 2015, 9, 3875-3886.   | 14.6 | 60        |
| 21 | Origin and Future of Plasmonic Optical Tweezers. <i>Nanomaterials</i> , 2015, 5, 1048-1065.  | 4.1  | 55        |
| 22 | Stress-Induced 3D Chiral Fractal Metasurface for Enhanced and Stabilized Broadband Near-Field Optical Chirality. <i>Advanced Optical Materials</i> , 2019, 7, 1900617.                                   | 7.3  | 55        |
| 23 | Low-Threshold Whispering Gallery Mode Lasing from Self-Assembled Microspheres of Single-Sort Conjugated Polymers. <i>Advanced Optical Materials</i> , 2017, 5, 1700123.                                  | 7.3  | 52        |
| 24 | Facet-dependent optical properties of Pd-Cu <sub>2</sub> O core-shell nanocubes and octahedra. <i>Nanoscale</i> , 2015, 7, 11135-11141.  | 5.6  | 51        |
| 25 | The correlation between ion production and emission intensity in the laser-induced breakdown spectroscopy of liquid droplets. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2002, 57, 35-48. | 2.9  | 47        |
| 26 | Robust Angular Anisotropy of Circularly Polarized Luminescence from a Single Twisted-Bipolar Polymeric Microsphere. <i>Journal of the American Chemical Society</i> , 2021, 143, 8772-8779.              | 13.7 | 47        |
| 27 | Facile synthesis of Au-Pd core-shell nanocrystals with systematic shape evolution and tunable size for plasmonic property examination. <i>Nanoscale</i> , 2014, 6, 7656.                                 | 5.6  | 43        |
| 28 | Matrix effect on emission/current correlated analysis in laser-induced breakdown spectroscopy of liquid droplets. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2004, 59, 321-326.           | 2.9  | 39        |
| 29 | Mode Conversion in High-Definition Plasmonic Optical Nanocircuits. <i>Nano Letters</i> , 2014, 14, 3881-3886.  | 9.1  | 36        |
| 30 | Optical microresonator arrays of fluorescence-switchable diarylethenes with unreplicable spectral fingerprints. <i>Materials Horizons</i> , 2020, 7, 1801-1808.  | 12.2 | 36        |
| 31 | Slant-gap plasmonic nanoantennas for optical chirality engineering and circular dichroism enhancement. <i>Optics Express</i> , 2014, 22, 7434.   | 3.4  | 34        |
| 32 | Synthesis and Evaluation of Aminothiazole-Paeonol Derivatives as Potential Anticancer Agents. <i>Molecules</i> , 2016, 21, 145.  | 3.8  | 33        |
| 33 | Subwavelength broadband splitters and switches for femtosecond plasmonic signals. <i>Optics Express</i> , 2010, 18, 11810.   | 3.4  | 31        |
| 34 | Deterministic Synthesis of Optical Vortices in Tailored Plasmonic Archimedes Spiral. <i>IEEE Photonics Journal</i> , 2013, 5, 4800409-4800409.   | 2.0  | 30        |
| 35 | Laser-induced breakdown spectroscopy in analysis of Al <sup>3+</sup> liquid droplets: On-line preconcentration by use of flow-injection manifold. <i>Analytica Chimica Acta</i> , 2007, 581, 303-308.    | 5.4  | 29        |
| 36 | Laser-induced breakdown spectroscopy of liquid droplets: correlation analysis with plasma-induced current versus continuum background. <i>Journal of Analytical Atomic Spectrometry</i> , 2005, 20, 53.  | 3.0  | 28        |

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|----|--|------|-----------|
| 37 | The Modulation Effect of Transverse, Antibonding, and Higher-Order Longitudinal Modes on the Two-Photon Photoluminescence of Gold Plasmonic Nanoantennas. <i>ACS Nano</i> , 2014, 8, 9053-9062.  | 14.6 | 26        |
| 38 | HNO <sub>3</sub> -Assisted Polyol Synthesis of Ultralarge Single-Crystalline Ag Microplates and Their Far Propagation Length of Surface Plasmon Polariton. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 11791-11798.                                 | 8.0  | 23        |
| 39 | Extremely confined gap plasmon modes: when nonlocality matters. <i>Nature Communications</i> , 2022, 13, .   | 12.8 | 22        |
| 40 | Plasmonic mode converter for controlling optical impedance and nanoscale light-matter interaction. <i>Optics Express</i> , 2012, 20, 20342.  | 3.4  | 20        |
| 41 | Photoluminescence-Driven Broadband Transmitting Directional Optical Nanoantennas. <i>Nano Letters</i> , 2018, 18, 6002-6008.   | 9.1  | 19        |
| 42 | Modal Symmetry Controlled Second-Harmonic Generation by Propagating Plasmons. <i>Nano Letters</i> , 2019, 19, 6424-6428.   | 9.1  | 19        |
| 43 | Fabrication of Bimetallic Au@Pd@Au Nanobricks as an Archetype of Robust Nanoplasmonic Sensors. <i>Chemistry of Materials</i> , 2018, 30, 204-213.  | 6.7  | 17        |
| 44 | Circular Dichroism in Nanoparticle Helices as a Template for Assessing Quantum-Informed Models in Plasmonics. <i>ACS Photonics</i> , 2018, 5, 5017-5024.   | 6.6  | 17        |
| 45 | Design and characterization of a plasmonic Doppler grating for azimuthal angle-resolved surface plasmon resonances. <i>Nanoscale</i> , 2017, 9, 10811-10819.   | 5.6  | 15        |
| 46 | Flow-Injection Inductively Coupled Plasma Mass Spectrometer Incorporated with an Ultrasonic Nebulizer-Membrane Dryer: Application to Trace Lead Detection in Aqueous Solution and Seawater. <i>Applied Spectroscopy</i> , 2001, 55, 604-610.                     | 2.2  | 13        |
| 47 | Design of novel TiO <sub>2</sub> @SiO <sub>2</sub> core-shell helical nanostructured anti-reflective coatings on Cu(In,Ga)Se <sub>2</sub> solar cells with enhanced power conversion efficiency. <i>Journal of Materials Chemistry A</i> , 2019, 7, 11452-11459. | 10.3 | 13        |
| 48 | Emission Manipulation by DNA Origami-Assisted Plasmonic Nanoantennas. <i>Advanced Optical Materials</i> , 2021, 9, 2100848.  | 7.3  | 13        |
| 49 | Spatially Resolving the Enhancement Effect in Surface-Enhanced Coherent Anti-Stokes Raman Scattering by Plasmonic Doppler Gratings. <i>ACS Nano</i> , 2021, 15, 809-818.   | 14.6 | 11        |
| 50 | Plasmonic elliptical nanoholes for chiroptical analysis and enantioselective optical trapping. <i>Nanoscale</i> , 2021, 13, 9185-9192.   | 5.6  | 10        |
| 51 | Probing the acoustic vibrations of complex-shaped metal nanoparticles with four-wave mixing. <i>Optics Express</i> , 2016, 24, 23747.  | 3.4  | 9         |
| 52 | Fabrication of self-assembled spherical Gold Particles by pulsed UV Laser Treatment. <i>Scientific Reports</i> , 2018, 8, 11283.   | 3.3  | 9         |
| 53 | Photoinduced Electron Transfer of Oxazine 1/TiO <sub>2</sub> Nanoparticles at Single Molecule Level by Using Confocal Fluorescence Microscopy. <i>Langmuir</i> , 2010, 26, 9050-9060.  | 3.5  | 8         |
| 54 | Generation of optical chirality patterns with plane waves, evanescent waves and surface plasmon waves. <i>Optics Express</i> , 2020, 28, 760.  | 3.4  | 8         |

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|----|--|-----|-----------|
| 55 | Subwavelength localization of near fields in coupled metallic spheres for single-emitter polarization analysis. <i>Optics Letters</i> , 2011, 36, 2339.  | 3.3 | 7         |
| 56 | Designable Spectrometer-Free Index Sensing Using Plasmonic Doppler Gratings. <i>Analytical Chemistry</i> , 2019, 91, 9382-9387.  | 6.5 | 7         |
| 57 | Driving plasmonic nanoantennas at perfect impedance matching using generalized coherent perfect absorption. <i>Nanophotonics</i> , 2021, 10, 1879-1887.  | 6.0 | 7         |
| 58 | Spectrometer-free Optical Hydrogen Sensing Based on Fano-like Spatial Distribution of Transmission in a Metal-insulator-metal Plasmonic Doppler Grating. <i>Advanced Optical Materials</i> , 2021, 9, 2100869. | 7.3 | 7         |
| 59 | Laser-induced Breakdown Spectroscopy of Liquid Droplets Based on Plasma-induced Current Correlation. <i>Journal of the Chinese Chemical Society</i> , 2014, 61, 175-186.                                       | 1.4 | 6         |
| 60 | Special Issue "Nonlinear and Ultrafast Nanophotonics". <i>ACS Photonics</i> , 2016, 3, 1333-1335.  | 6.6 | 4         |
| 61 | Chiral Structured Illumination Microscopy. <i>ACS Photonics</i> , 2021, 8, 130-134.  | 6.6 | 4         |
| 62 | Tailoring the interaction between matter and polarized light with plasmonic optical antennas. <i>Proceedings of SPIE</i> , 2011, , .   | 0.8 | 3         |
| 63 | Lasers: Low-Threshold Whispering Gallery Mode Lasing from Self-Assembled Microspheres of Single-Sort Conjugated Polymers (Advanced Optical Materials 10/2017). <i>Advanced Optical Materials</i> , 2017, 5, .  | 7.3 | 2         |
| 64 | Signal and noise analysis for chiral structured illumination microscopy. <i>Optics Express</i> , 2021, 29, 23056.  | 3.4 | 2         |
| 65 | Optical responses of Fano resonators in non-spectral parametric domains. <i>Optics Letters</i> , 2022, 47, 3720.   | 3.3 | 2         |
| 66 | Coherent spectroscopies on ultrashort time and length scales. <i>EPJ Web of Conferences</i> , 2013, 41, 09017.   | 0.3 | 1         |
| 67 | Plasmonic modes of strongly-coupled single-crystalline gold nanoparticle dimers. , 2011, , .   |     | 0         |
| 68 | Multi-photon autocorrelation in gold nanostructures. , 2011, , .   |     | 0         |
| 69 | Dynamics of two-photon photoluminescence in gold nanostructures. <i>Proceedings of SPIE</i> , 2012, , .  | 0.8 | 0         |
| 70 | Influence of morphology on the plasmonic enhancement effect of Au@TiO <sub>2</sub> core-shell nanoparticles in dye-sensitized solar cells. , 2013, , .   |     | 0         |
| 71 | Optical trapping of nanoscale plasmonic optical lattice in microfluidic environments. <i>Proceedings of SPIE</i> , 2014, , .   | 0.8 | 0         |
| 72 | Plasmonic archimedes spiral for selective optical trapping and rotation of optically isotropic particles. <i>Proceedings of SPIE</i> , 2014, , .   | 0.8 | 0         |

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|----|--|-----|-----------|
| 73 | Plasmonic whispering-gallery modes in a semiconductor-insulator-metal hybrid structure. , 2015, , .                        |     | 0         |
| 74 | Ultrafast second-harmonic generations in a plasmonic two-wire transmission-line. , 2017, , .                               |     | 0         |
| 75 | Structured illumination microscopy for simultaneous imaging of achiral and chiral domains. Optics Letters, 2021, 46, 4546. | 3.3 | 0         |
| 76 | Efficient Mode Converters for Plasmonic Optical Nanocircuits. , 2012, , .  |     | 0         |
| 77 | Plasmon enhanced nanoscale trapping in a two dimensional optical lattice. , 2013, , .                                      |     | 0         |
| 78 | Two-photon Photohinescence Investigation of Transverse Plasmonic Mode of Single-crystalline Gold Nanoantennas. , 2014, , . |     | 0         |
| 79 | Second Harmonic Generation from Symmetric and Asymmetric Gold Nanoantennas. , 2015, , .                                    |     | 0         |
| 80 | Second-harmonic generations in a plasmonic two-wire transmission-line. , 2018, , .   |     | 0         |
| 81 | 3D Archimedean spiral metasurface for enhances broadband optical chirality. , 2021, , .                                    |     | 0         |