

Angelo Monguzzi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2283498/publications.pdf>

Version: 2024-02-01

80
papers

3,832
citations

126907

33
h-index

123424

61
g-index

83
all docs

83
docs citations

83
times ranked

3134
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Low power, non-coherent sensitized photon up-conversion: modelling and perspectives. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 4322. | 2.8 | 410 |
| 2 | Upconversion-induced fluorescence in multicomponent systems: Steady-state excitation power threshold. <i>Physical Review B</i> , 2008, 78, . | 3.2 | 398 |
| 3 | Upconversion-induced delayed fluorescence in multicomponent organic systems: Role of Dexter energy transfer. <i>Physical Review B</i> , 2008, 77, . | 3.2 | 182 |
| 4 | Low-Power-Photon Up-Conversion in Dual-Dye-Loaded Polymer Nanoparticles. <i>Advanced Functional Materials</i> , 2012, 22, 139-143. | 14.9 | 153 |
| 5 | Highly Efficient Photon Upconversion in Self-Assembled Light-Harvesting Molecular Systems. <i>Scientific Reports</i> , 2015, 5, 10882. | 3.3 | 145 |
| 6 | Achieving the photon up-conversion thermodynamic yield upper limit by sensitized triplet-triplet annihilation. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 4020-4024. | 2.8 | 134 |
| 7 | Multicomponent Polymeric Film for Red to Green Low Power Sensitized Up-Conversion. <i>Journal of Physical Chemistry A</i> , 2009, 113, 1171-1174. | 2.5 | 131 |
| 8 | Fast and long-range triplet exciton diffusion in metal-organic frameworks for photon upconversion at ultralow excitation power. <i>Nature Materials</i> , 2015, 14, 924-930. | 27.5 | 111 |
| 9 | High Efficiency Up-Converting Single Phase Elastomers for Photon Managing Applications. <i>Advanced Energy Materials</i> , 2013, 3, 680-686. | 19.5 | 108 |
| 10 | Sensitized NIR Erbium(III) Emission in Confined Geometries: A New Strategy for Light Emitters in Telecom Applications. <i>Journal of the American Chemical Society</i> , 2010, 132, 4574-4576. | 13.7 | 99 |
| 11 | Composite fast scintillators based on high-Z fluorescent metal-organic framework nanocrystals. <i>Nature Photonics</i> , 2021, 15, 393-400. | 31.4 | 93 |
| 12 | Nanoparticle One-Dimensional Photonic Crystal Dye Laser. <i>Small</i> , 2009, 5, 2048-2052. | 10.0 | 85 |
| 13 | Spectral converters for photovoltaics â€“ Whatâ€™s ahead. <i>Materials Today</i> , 2020, 33, 105-121. | 14.2 | 83 |
| 14 | Efficient Broadband Triplet-Triplet Annihilation-Assisted Photon Upconversion at Subsolar Irradiance in Fully Organic Systems. <i>Advanced Functional Materials</i> , 2015, 25, 5617-5624. | 14.9 | 79 |
| 15 | Effect of an External Magnetic Field on the Up-Conversion Photoluminescence of Organic Films: The Role of Disorder in Triplet-Triplet Annihilation. <i>Physical Review Letters</i> , 2009, 102, 087404. | 7.8 | 66 |
| 16 | Recent advances in the application triplet-triplet annihilation-based photon upconversion systems to solar technologies. <i>Journal of Photonics for Energy</i> , 2017, 8, 1. | 1.3 | 64 |
| 17 | Broadband Up-Conversion at Subsolar Irradiance: Triplet-Triplet Annihilation Boosted by Fluorescent Semiconductor Nanocrystals. <i>Nano Letters</i> , 2014, 14, 6644-6650. | 9.1 | 62 |
| 18 | Nanodroplet-Containing Polymers for Efficient Low-Power Light Upconversion. <i>Advanced Materials</i> , 2017, 29, 1702992. | 21.0 | 62 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Photocatalytic Water-Splitting Enhancement by Sub-Bandgap Photon Harvesting. ACS Applied Materials & Interfaces, 2017, 9, 40180-40186. | 8.0 | 60 |
| 20 | Self-Assembled Dual Dye-Doped Nanosized Micelles for High-Contrast Up-Conversion Bioimaging. Advanced Functional Materials, 2016, 26, 8447-8454. | 14.9 | 58 |
| 21 | Permanent excimer superstructures by supramolecular networking of metal quantum clusters. Science, 2016, 353, 571-575. | 12.6 | 54 |
| 22 | Solid-State Sensitized Upconversion in Polyacrylate Elastomers. Journal of Physical Chemistry C, 2016, 120, 2609-2614. | 3.1 | 53 |
| 23 | Novel Er ³⁺ Perfluorinated Complexes for Broadband Sensitized Near Infrared Emission. Chemistry of Materials, 2009, 21, 128-135. | 6.7 | 52 |
| 24 | Engineering Porous Emitting Framework Nanoparticles with Integrated Sensitizers for Low-Power Photon Upconversion by Triplet Fusion. Advanced Materials, 2019, 31, e1903309. | 21.0 | 46 |
| 25 | NIR emitting ytterbium chelates for colourless luminescent solar concentrators. Physical Chemistry Chemical Physics, 2012, 14, 6452. | 2.8 | 45 |
| 26 | Quasi-thresholdless Photon Upconversion in Metal-Organic Framework Nanocrystals. Nano Letters, 2019, 19, 2169-2177. | 9.1 | 43 |
| 27 | DFB laser action in a flexible fully plastic multilayer. Physical Chemistry Chemical Physics, 2010, 12, 337-340. | 2.8 | 40 |
| 28 | Thermoresponsive low-power light upconverting polymer nanoparticles. Materials Horizons, 2016, 3, 602-607. | 12.2 | 40 |
| 29 | Sensitized near infrared emission from lanthanide-exchanged zeolites. Applied Physics Letters, 2008, 92, 123301. | 3.3 | 39 |
| 30 | Unraveling Triplet Excitons Photophysics in Hyper-Cross-Linked Polymeric Nanoparticles: Toward the Next Generation of Solid-State Upconverting Materials. Journal of Physical Chemistry Letters, 2016, 7, 2779-2785. | 4.6 | 38 |
| 31 | Highly luminescent scintillating hetero-ligand MOF nanocrystals with engineered Stokes shift for photonic applications. Nature Communications, 2022, 13, . | 12.8 | 38 |
| 32 | Highly Fluorescent Metal-Organic-Framework Nanocomposites for Photonic Applications. Nano Letters, 2018, 18, 528-534. | 9.1 | 37 |
| 33 | High Photon Upconversion Efficiency with Hybrid Triplet Sensitizers by Ultrafast Hole-Routing in Electronic-Doped Nanocrystals. Advanced Materials, 2020, 32, e2002953. | 21.0 | 37 |
| 34 | One Dimensional Polymeric Organic Photonic Crystals for DFB Lasers. International Journal of Photoenergy, 2008, 2008, 1-4. | 2.5 | 33 |
| 35 | Effects of Progressive Halogen Substitution on the Photoluminescence Properties of an Erbium-Porphyrin Complex. Journal of Physical Chemistry A, 2010, 114, 4163-4168. | 2.5 | 32 |
| 36 | Chemically Sustainable Large Stokes Shift Derivatives for High-Performance Large-Area Transparent Luminescent Solar Concentrators. Joule, 2020, 4, 1988-2003. | 24.0 | 32 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Nanostructured Polymers Enable Stable and Efficient Low-Power Photon Upconversion. <i>Advanced Functional Materials</i> , 2021, 31, 2004495. | 14.9 | 31 |
| 38 | Perfluorinated nitrosopyrazolone-based erbium chelates: a new efficient solution processable NIR emitter. <i>Chemical Communications</i> , 2009, , 5103. | 4.1 | 28 |
| 39 | Triplet-triplet annihilation based photon up-conversion in hybrid molecule-semiconductor nanocrystal systems. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 12353-12359. | 2.8 | 27 |
| 40 | Growth of SnO ₂ nanocrystals controlled by erbium doping in silica. <i>Nanotechnology</i> , 2006, 17, 4031-4036. | 2.6 | 26 |
| 41 | Vibrational overtones quenching of near infrared emission in Er ³⁺ complexes. <i>New Journal of Chemistry</i> , 2009, 33, 1542. | 2.8 | 26 |
| 42 | Highly efficient photon upconversion based on triplet-triplet annihilation from bichromophoric annihilators. <i>Journal of Materials Chemistry C</i> , 2021, 9, 14201-14208. | 5.5 | 26 |
| 43 | Photon upconversion in multicomponent systems: Role of back energy transfer. <i>Journal of Chemical Physics</i> , 2020, 153, 114302. | 3.0 | 25 |
| 44 | Control of π - π Interactions in Epitaxial Films of Platinum(II) Octaethyl Porphyrin. <i>Chemistry of Materials</i> , 2011, 23, 832-840. | 6.7 | 24 |
| 45 | Demonstration of cellular imaging by using luminescent and anti-cytotoxic europium-doped hafnia nanocrystals. <i>Nanoscale</i> , 2018, 10, 7933-7940. | 5.6 | 24 |
| 46 | Self-Assembled pH-Sensitive Fluoromagnetic Nanotubes as Archetype System for Multimodal Imaging of Brain Cancer. <i>Advanced Functional Materials</i> , 2018, 28, 1707582. | 14.9 | 22 |
| 47 | Energy transfer enhancement by oxygen perturbation of spin-forbidden electronic transitions in aromatic systems. <i>Physical Review B</i> , 2010, 82, . | 3.2 | 21 |
| 48 | Quantized Doping of Individual Colloidal Nanocrystals Using Size-Focused Metal Quantum Clusters. <i>ACS Nano</i> , 2017, 11, 6233-6242. | 14.6 | 21 |
| 49 | Two-dimensional structural ordering in a chromophoric ionic liquid for triplet energy migration-based photon upconversion. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 3233-3240. | 2.8 | 21 |
| 50 | White light excitation of the near infrared Er ³⁺ emission in exchanged zeolite sensitised by oxygen vacancies. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 5605. | 2.8 | 20 |
| 51 | Predictive modeling of the vibrational quenching in emitting lanthanides complexes. <i>Synthetic Metals</i> , 2012, 161, 2693-2699. | 3.9 | 20 |
| 52 | Metal Nanoclusters with Synergistically Engineered Optical and Buffering Activity of Intracellular Reactive Oxygen Species by Compositional and Supramolecular Design. <i>Scientific Reports</i> , 2017, 7, 5976. | 3.3 | 18 |
| 53 | Confined diffusion of erbium excitations in SnO ₂ nanoparticles embedded in silica: A time-resolved infrared luminescence study. <i>Physical Review B</i> , 2009, 79, . | 3.2 | 17 |
| 54 | Bottom-Up Synthesis and Self-Assembly of Copper Clusters into Permanent Excimer Supramolecular Nanostructures. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7051-7055. | 13.8 | 17 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Cascade sensitization of triplet-triplet annihilation based photon upconversion at sub-solar irradiance. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 9745-9750. | 2.8 | 17 |
| 56 | Pre-crystallization heat treatment and infrared luminescence enhancement in Ni ²⁺ -doped transparent glass-ceramics. <i>Journal of Non-Crystalline Solids</i> , 2019, 515, 42-49. | 3.1 | 15 |
| 57 | Developing solid-state photon upconverters based on sensitized triplet-triplet annihilation. <i>Journal of Applied Physics</i> , 2021, 129, . | 2.5 | 15 |
| 58 | Functionalized Scintillating Nanotubes for Simultaneous Radio- and Photodynamic Therapy of Cancer. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 12997-13008. | 8.0 | 13 |
| 59 | Lasing in one dimensional dye-doped random multilayer. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 12947. | 2.8 | 11 |
| 60 | Laser dye doped nanoparticles for highly photostable optical nanoamplifiers. <i>RSC Advances</i> , 2012, 2, 11731. | 3.6 | 11 |
| 61 | Second-Order Photochemical Upconversion in Organic Systems. <i>Journal of Physical Chemistry A</i> , 2014, 118, 1439-1442. | 2.5 | 10 |
| 62 | Mineral-organic hybrid nanotubes as highly sensitive solid state optical chemical sensors. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2491-2498. | 2.8 | 10 |
| 63 | Block Copolymer Stabilized Liquid Nanodroplets Facilitate Efficient Triplet Fusion-Based Photon Upconversion in Solid Polymer Matrices. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 43314-43322. | 8.0 | 10 |
| 64 | Anharmonic overtones quenching in Er ³⁺ complexes. <i>Synthetic Metals</i> , 2009, 159, 2410-2412. | 3.9 | 8 |
| 65 | Spectroscopic characterization of red perylimide/surfactant nanocomposites. <i>Journal of Materials Science</i> , 2011, 46, 6402-6407. | 3.7 | 8 |
| 66 | Donor-Acceptor Control in Grown-Glass Gallium Oxide Nanocrystals by Crystallization-Driven Heterovalent Doping. <i>ChemPhysChem</i> , 2017, 18, 662-669. | 2.1 | 7 |
| 67 | Treatment with ROS detoxifying gold quantum clusters alleviates the functional decline in a mouse model of Friedreich ataxia. <i>Science Translational Medicine</i> , 2021, 13, . | 12.4 | 7 |
| 68 | Bypassing the statistical limit of singlet generation in sensitized upconversion using fluorinated conjugated systems. <i>Photochemical and Photobiological Sciences</i> , 2022, 21, 913-921. | 2.9 | 7 |
| 69 | Diffusion Enhanced Upconversion in Organic Systems. <i>International Journal of Photoenergy</i> , 2008, 2008, 1-5. | 2.5 | 5 |
| 70 | White light generation by sensitized photon up-conversion. <i>Chemical Physics Letters</i> , 2012, 521, 17-19. | 2.6 | 4 |
| 71 | The Sensitization of Scintillation in Polymeric Composites Based on Fluorescent Nanocomplexes. <i>Nanomaterials</i> , 2021, 11, 3387. | 4.1 | 4 |
| 72 | Bioimaging: Self-Assembled Dual Dye-Doped Nanosized Micelles for High-Contrast Up-Conversion Bioimaging (<i>Adv. Funct. Mater.</i> 46/2016). <i>Advanced Functional Materials</i> , 2016, 26, 8446-8446. | 14.9 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Publisher's Note: Upconversion-induced fluorescence in multicomponent systems: Steady-state excitation power threshold [Phys. Rev. B, 195112 (2008)]. Physical Review B, 2009, 80, . | 3.2 | 2 |
| 74 | On the effects of a solid environment on sensitized up-conversion. Proceedings of SPIE, 2012, , . | 0.8 | 2 |
| 75 | Laboratory Simulation of Space Weathering on Silicate Surfaces in the Water Environment. ACS Earth and Space Chemistry, 2022, 6, 197-206. | 2.7 | 2 |
| 76 | Sensitized near-infrared emission in novel neodymium complexes bearing oligothiophene derivatives as antennae. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 146, 45-49. | 3.5 | 1 |
| 77 | Composite Functional Nanomaterials Assembled via Electrostatic Interactions of Inorganic Surfaces and Organic Molecules. , 2018, , 32-37. | | 1 |
| 78 | Non-radiative decay processes in Er ³⁺ organic complexes. , 2007, , . | | 0 |
| 79 | Light emission and structural properties of undoped and erbium-doped nanostructured silica with SnO ₂ nanoparticles. Proceedings of SPIE, 2007, , . | 0.8 | 0 |
| 80 | Photon Upconversion Based on Sensitized Triplet-Triplet Annihilation (sTTA) in Solids. , 2022, , 49-70. | | 0 |