# Marlan O Scully

List of Publications by Year
in descending order



| 56 | 1,051 | 394421 | 477307 |
|---|---|---|---|
| papers | citations | 19 | 29 |
| | | h-index | g-index |

| 57 | 57 | 57 | 1289 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Quantum optical immunoassay: upconversion nanoparticle-based neutralizing assay for COVID-19. Scientific Reports, 2022, 12, 1263. | 3.3 | 8 |
| 2 | Label-free sensing of cells with fluorescence lifetime imaging: The quest for metabolic heterogeneity. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 7.1 | 35 |
| 3 | Sub-Nyquist computational ghost imaging with orthonormal spectrum-encoded speckle patterns. Physical Review A, 2022, 105, . | 2.5 | 11 |
| 4 | 0.8% Nyquist computational ghost imaging via non-experimental deep learning. Optics Communications, 2022, 520, 128450. | 2.1 | 11 |
| 5 | Characterization and Identification of Fungal Conidia via Shifted Excitation Raman Difference Spectroscopy. Reports in Advances of Physical Sciences, 2022, 06, . | 0.2 | 0 |
| 6 | Resolving the Sequence of RNA Strands by Tip-Enhanced Raman Spectroscopy. ACS Photonics, 2021, 8, 424-430. | 6.6 | 15 |
| 7 | Quantum Advantage with Seeded Squeezed Light for Absorption Measurement. Physical Review Applied, 2021, 15, . | 3.8 | 12 |
| 8 | Natural and magnetically induced entanglement of hyperfine-structure states in atomic hydrogen. Physical Review A, 2021, 103, . | 2.5 | 1 |
| 9 | Sub-Rayleigh second-order correlation imaging using spatially distributive colored noise speckle patterns. Optics Express, 2021, 29, 19621. | 3.4 | 11 |
| 10 | Noise-robust computational ghost imaging with pink noise speckle patterns. Physical Review A, 2021, 104, . | 2.5 | 25 |
| 11 | Raman Spectroscopy as a Robust New Tool for Rapid and Accurate Evaluation of Drought Tolerance Levels in Both Genetically Diverse and Near-Isogenic Maize Lines. Frontiers in Plant Science, 2021, 12, 621711. | 3.6 | 3 |
| 12 | Compact X-ray laser amplifier in the â€œWater Windowâ€• Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 255, 119675. | 3.9 | 2 |
| 13 | Raman Characterization of Fungal DHN and DOPA Melanin Biosynthesis Pathways. Journal of Fungi (Basel, Switzerland), 2021, 7, 841. | 3.5 | 12 |
| 14 | Observation of Intensity Squeezing in Resonance Fluorescence from a Solid-State Device. Physical Review Letters, 2020, 125, 153601. | 7.8 | 11 |
| 15 | Enhancing sensitivity of lateral flow assay with application to SARS-CoV-2. Applied Physics Letters, 2020, 117, 120601. | 3.3 | 34 |
| 16 | Laser spectroscopic technique for direct identification of a single virus I: FASTER CARS. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27820-27824. | 7.1 | 25 |
| 17 | Simultaneous Excitation of Two Noninteracting Atoms with Time-Frequency Correlated Photon Pairs in a Superconducting Circuit. Physical Review Letters, 2020, 125, 133601. | 7.8 | 15 |
| 18 | Nonlinear spin currents. Physical Review B, 2020, 102, . | 3.2 | 18 |

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|---|---|---|---|
| 19 | Molecular origin of the Raman signal from Aspergillus nidulans conidia and observation of fluorescence vibrational structure at room temperature. Scientific Reports, 2020, 10, 5428. | 3.3 | 8 |
| 20 | Observation of Acoustically Induced Transparency for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î³</mml:mi></mml:mrow></mml:math> -Ray Photons. Physical Review Letters, 2020, 124, 163602. | 7.8 | 12 |
| 21 | Identification of toxic mold species through Raman spectroscopy of fungal conidia. PLoS ONE, 2020, 15, e0242361. | 2.5 | 10 |
| 22 | Quantum Interference between Light Sources Separated by 150 Million Kilometers. Physical Review Letters, 2019, 123, 080401. | 7.8 | 57 |
| 23 | Polariton-Assisted Cooperativity of Molecules in Microcavities Monitored by Two-Dimensional Infrared Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 4448-4454. | 4.6 | 24 |
| 24 | Quantum plasmonic control of trions in a picocavity with monolayer WS <sub>2</sub>. Science Advances, 2019, 5, eaau8763. | 10.3 | 39 |
| 25 | Synthesis of antisymmetric spin exchange interaction and chiral spin clusters in superconducting circuits. Nature Physics, 2019, 15, 382-386. | 16.7 | 58 |
| 26 | Probing the Effect of Chemical Dopant Phase on Photoluminescence of Monolayer MoS<sub>2</sub> Using in Situ Raman Microspectroscopy. Journal of Physical Chemistry C, 2019, 123, 15738-15743. | 3.1 | 11 |
| 27 | Fluorescence imaging of stained red blood cells with simultaneous resonance Raman photostability analysis. Analyst, The, 2019, 144, 4362-4370. | 3.5 | 2 |
| 28 | Fiber-Optic Quantum Thermometry with Germanium-Vacancy Centers in Diamond. ACS Photonics, 2019, 6, 1690-1693. | 6.6 | 26 |
| 29 | CARS spectroscopy of Aspergillus nidulans spores. Scientific Reports, 2019, 9, 1789. | 3.3 | 7 |
| 30 | Nuclear Quantum Memory and Time Sequencing of a Single <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math> Photon. Physical Review Letters, 2019, 123, 250504. | 7.8 | 18 |
| 31 | Attosecond Pulse Amplification in a Plasma-Based X-Ray Laser Dressed by an Infrared Laser Field. Physical Review Letters, 2019, 123, 243903. | 7.8 | 19 |
| 32 | Fluorescent nanodiamondâ€bacteriophage conjugates maintain host specificity. Biotechnology and Bioengineering, 2018, 115, 1427-1436. | 3.3 | 11 |
| 33 | Light, the universe and everything â€“ 12 Herculean tasks for quantum cowboys and black diamond skiers. Journal of Modern Optics, 2018, 65, 1261-1308. | 1.3 | 6 |
| 34 | Controlled supercontinua via spatial beam shaping. Journal of Modern Optics, 2018, 65, 1332-1335. | 1.3 | 8 |
| 35 | Giant Chemical Surface Enhancement of Coherent Raman Scattering on MoS<sub>2</sub>. ACS Photonics, 2018, 5, 4960-4968. | 6.6 | 28 |
| 36 | Two-level masers as heat-to-work converters. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9941-9944. | 7.1 | 38 |

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|---|---|---|---|
| 37 | Spatially-Resolved Photoluminescence of Monolayer MoS<sub>2</sub> under Controlled Environment for Ambient Optoelectronic Applications. ACS Applied Nano Materials, 2018, 1, 6226-6235. | 5.0 | 23 |
| 38 | Quantum optics approach to radiation from atoms falling into a black hole. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8131-8136. | 7.1 | 48 |
| 39 | Interaction of femtosecond laser pulses with plants: towards distinguishing weeds and crops using plasma temperature. Journal of Modern Optics, 2017, 64, 942-947. | 1.3 | 4 |
| 40 | Tip-assisted directional growth of atomically thin Ag islands. Journal of Modern Optics, 2017, 64, 936-941. | 1.3 | 0 |
| 41 | In vivo diagnostics of early abiotic plant stress response via Raman spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3393-3396. | 7.1 | 116 |
| 42 | Formation and amplification of subfemtosecond x-ray pulses in a plasma medium of hydrogenlike ions with a modulated resonant transition. Physical Review A, 2017, 96, . | 2.5 | 15 |
| 43 | Quantum statistics of a single-atom Scovilâ€“Schulz-DuBois heat engine. Physical Review A, 2017, 96, . | 2.5 | 26 |
| 44 | Enhanced coupling of light into a turbid medium through microscopic interface engineering. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7941-7946. | 7.1 | 8 |
| 45 | Reply to Dong and Zhao: Plant stress via Raman spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5488-E5490. | 7.1 | 4 |
| 46 | Application of the low-finesse <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î³</mml:mi></mml:math> -ray frequency comb for high-resolution spectroscopy. Physical Review A, 2016, 94, . | 2.5 | 7 |
| 47 | Analytical treatment of the continuous wave driving of a two-level atom without making the rotating wave approximation. Journal of Modern Optics, 2016, 63, 27-32. | 1.3 | 4 |
| 48 | Transformation of a single-photon field into bunches of pulses. Physical Review A, 2015, 92, . | 2.5 | 27 |
| 49 | Spatially offset Raman microspectroscopy of highly scattering tissue: theory and experiment. Journal of Modern Optics, 2015, 62, 97-101. | 1.3 | 21 |
| 50 | Lightweight Raman spectroscope using time-correlated photon-counting detection. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12315-12320. | 7.1 | 19 |
| 51 | Sideband generation of transient lasing without population inversion. Physical Review A, 2014, 90, . | 2.5 | 5 |
| 52 | Atom lithography with subwavelength resolution via Rabi oscillations. Physical Review A, 2013, 87, . | 2.5 | 18 |
| 53 | Experimental observation of carrier-envelope-phase effects by multicycle pulses. Physical Review A, 2011, 83, . | 2.5 | 23 |
| 54 | Bohr model and dimensional scaling analysis of atoms and molecules. International Reviews in Physical Chemistry, 2008, 27, 665-723. | 2.3 | 42 |

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|---|---|---|---|
| 55 | Fermi's golden rule does not adequately describe Dicke's superradiance. Journal of Modern Optics, 2008, 55, 3369-3378. | 1.3 | 10 |
| 56 | Free-electron laser without inversion in the high gain regime. Journal of Modern Optics, 2003, 50, 2507-2514. | 1.3 | 0 |