

# Ziad Musslimani

## List of Publications by Year in descending order

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53  
papers

6,709  
citations

186265

28  
h-index

175258

52  
g-index

55  
all docs

55  
docs citations

55  
times ranked

2910  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Non-Hermitian physics and PT symmetry. Nature Physics, 2018, 14, 11-19.  | 16.7 | 1,620     |
| 2  | Theory of coupled optical PT-symmetric structures. Optics Letters, 2007, 32, 2632.   | 3.3  | 1,104     |
| 3  | Integrable Nonlocal Nonlinear Schrödinger Equation. Physical Review Letters, 2013, 110, 064105.  | 7.8  | 633       |
| 4  | Inverse scattering transform for the integrable nonlocal nonlinear Schrödinger equation. Nonlinearity, 2016, 29, 915-946.  | 1.4  | 416       |
| 5  | Integrable Nonlocal Nonlinear Equations. Studies in Applied Mathematics, 2017, 139, 7-59.  | 2.4  | 361       |
| 6  | Fundamental and vortex solitons in a two-dimensional optical lattice. Optics Letters, 2003, 28, 2094.  | 3.3  | 314       |
| 7  | Spectral renormalization method for computing self-localized solutions to nonlinear systems. Optics Letters, 2005, 30, 2140.   | 3.3  | 176       |
| 8  | Discrete Diffraction Managed Spatial Solitons. Physical Review Letters, 2001, 87, 254102.  | 7.8  | 172       |
| 9  | Integrable discrete $\mathcal{PT}$ model. Physical Review E, 2014, 90, 032912.   | 7.8  | 172       |
| 10 | Composite Multihump Vector Solitons Carrying Topological Charge. Physical Review Letters, 2000, 84, 1164-1167.   | 7.8  | 133       |
| 11 | Analytical solutions to a class of nonlinear Schrödinger equations with $\mathcal{PT}$ -like potentials. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 244019. | 2.1  | 130       |
| 12 | General soliton solution to a nonlocal nonlinear Schrödinger equation with zero and nonzero boundary conditions. Nonlinearity, 2018, 31, 5385-5409.                            | 1.4  | 126       |
| 13 | Inverse scattering transform for the nonlocal nonlinear Schrödinger equation with nonzero boundary conditions. Journal of Mathematical Physics, 2018, 59, .                    | 1.1  | 125       |
| 14 | Continuous and discrete Schrödinger systems with parity-time-symmetric nonlinearities. Physical Review E, 2014, 89, 052918.  | 2.1  | 117       |
| 15 | Self-trapping of light in a two-dimensional photonic lattice. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 973.                                     | 2.1  | 97        |
| 16 | Observation of two-dimensional multimode solitons. Optics Letters, 2000, 25, 1113.   | 3.3  | 79        |
| 17 | Eliminating the Transverse Instabilities of Kerr Solitons. Physical Review Letters, 2000, 85, 4888-4891.   | 7.8  | 76        |
| 18 | Reverse Space-Time Nonlocal Sine-Gordon/Sinh-Gordon Equations with Nonzero Boundary Conditions. Studies in Applied Mathematics, 2018, 141, 267-307.                            | 2.4  | 68        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Discrete spatial solitons in a diffraction-managed nonlinear waveguide array: a unified approach. <i>Physica D: Nonlinear Phenomena</i> , 2003, 184, 276-303.                              | 2.8  | 66        |
| 20 | Rotating Propeller Solitons. <i>Physical Review Letters</i> , 2001, 87, 143901.  | 7.8  | 65        |
| 21 | Wave propagation through disordered media without backscattering and intensity variations. <i>Light: Science and Applications</i> , 2017, 6, e17035-e17035.                                | 16.6 | 60        |
| 22 | Methods for discrete solitons in nonlinear lattices. <i>Physical Review E</i> , 2002, 65, 026602.  | 2.1  | 59        |
| 23 | Integrable space-time shifted nonlocal nonlinear equations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2021, 409, 127516.                                | 2.1  | 45        |
| 24 | Discrete vector spatial solitons in a nonlinear waveguide array. <i>Physical Review E</i> , 2002, 65, 056618.  | 2.1  | 44        |
| 25 | Integrable nonlocal asymptotic reductions of physically significant nonlinear equations. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2019, 52, 15LT02.                     | 2.1  | 38        |
| 26 | Transverse instability of strongly coupled dark-bright Manakov vector solitons. <i>Optics Letters</i> , 2001, 26, 1981.  | 3.3  | 37        |
| 27 | Multicomponent two-dimensional solitons carrying topological charges. <i>Optics Letters</i> , 2000, 25, 61.  | 3.3  | 31        |
| 28 | Numerical study of one-dimensional and interacting Bose-Einstein condensates in a random potential. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 045302. | 1.5  | 31        |
| 29 | Optical beam instabilities in nonlinear nanosuspensions. <i>Optics Letters</i> , 2007, 32, 3185.   | 3.3  | 28        |
| 30 | Discrete nonlocal nonlinear Schrödinger systems: Integrability, inverse scattering and solitons. <i>Nonlinearity</i> , 2020, 33, 3653-3707.  | 1.4  | 28        |
| 31 | Suppression of transverse instabilities for vector solitons. <i>Physical Review E</i> , 1999, 60, R1170-R1173.   | 2.1  | 23        |
| 32 | Destruction of photocount oscillations by thermal noise. <i>Physical Review A</i> , 1995, 51, 4967-4973.   | 2.5  | 22        |
| 33 | Delayed-Action Interaction and Spin-Orbit Coupling between Solitons. <i>Physical Review Letters</i> , 2001, 86, 799-802.   | 7.8  | 21        |
| 34 | Vortices in Bose-Einstein condensates with asymmetric gain and loss. <i>Physical Review A</i> , 2017, 95, .  | 2.5  | 20        |
| 35 | Generalized uncertainty principle and analogue of quantum gravity in optics. <i>Physica D: Nonlinear Phenomena</i> , 2017, 338, 34-41.   | 2.8  | 19        |
| 36 | Collisions between (2+1)D rotating propeller solitons. <i>Optics Letters</i> , 2001, 26, 1577.   | 3.3  | 16        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Spectral transverse instabilities and soliton dynamics in the higher-order multidimensional nonlinear Schrödinger equation. <i>Physica D: Nonlinear Phenomena</i> , 2015, 313, 26-36.                           | 2.8 | 16        |
| 38 | Large coupling-strength expansion of the Møller-Plesset adiabatic connection: From paradigmatic cases to variational expressions for the leading terms. <i>Journal of Chemical Physics</i> , 2020, 153, 214112. | 3.0 | 16        |
| 39 | Long-wave instability in optical parametric oscillators. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1998, 249, 141-145.   | 2.6 | 14        |
| 40 | Nonlinear Schrödinger-Helmholtz equation as numerical regularization of the nonlinear Schrödinger equation. <i>Nonlinearity</i> , 2008, 21, 879-898.  | 1.4 | 13        |
| 41 | Constant Intensity Supermodes in Non-Hermitian Lattices. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016, 22, 42-47.   | 2.9 | 13        |
| 42 | Integrable nonlocal derivative nonlinear Schrödinger equations. <i>Inverse Problems</i> , 2022, 38, 065003.   | 2.0 | 11        |
| 43 | Enhancement of Persistent Currents by Hubbard Interactions in Disordered 1D Rings: Avoided Level Crossings Interpretation. <i>Journal De Physique, I</i> , 1995, 5, 1487-1499.                                  | 1.2 | 10        |
| 44 | Modulational instability in bulk dispersive quadratically nonlinear media. <i>Physica D: Nonlinear Phenomena</i> , 1998, 123, 235-243.  | 2.8 | 9         |
| 45 | Quantum phase distribution of thermal phase-squeezed states. <i>Physical Review A</i> , 1998, 57, 1451-1453.  | 2.5 | 7         |
| 46 | Dynamic quasicrystalline patterns: Wave-mode-Turing-mode resonance with Turing-mode self-interaction. <i>Physical Review E</i> , 2000, 62, 389-396.   | 2.1 | 7         |
| 47 | Kohn-Sham equations with functionals from the strictly-correlated regime: investigation with a spectral renormalization method. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 475602.                  | 1.8 | 6         |
| 48 | Resonant optical patterns in sodium vapor in a magnetic field. <i>Physical Review A</i> , 1999, 59, 1571-1576.  | 2.5 | 4         |
| 49 | Modulation Theory for Self-Focusing in the Nonlinear Schrödinger-Helmholtz Equation. <i>Numerical Functional Analysis and Optimization</i> , 2009, 30, 46-69.   | 1.4 | 4         |
| 50 | Time-dependent spectral renormalization method. <i>Physica D: Nonlinear Phenomena</i> , 2017, 358, 15-24.   | 2.8 | 3         |
| 51 | Time-dependent Duhamel renormalization method with multiple conservation and dissipation laws. <i>Nonlinearity</i> , 2022, 35, 1286-1310.   | 1.4 | 3         |
| 52 | Computing eigenfunctions and eigenvalues of boundary-value problems with the orthogonal spectral renormalization method. <i>Physical Review A</i> , 2018, 97, .   | 2.5 | 0         |
| 53 | Integrable Nonlocal PT Symmetric and Reverse Space-Time Nonlinear Schrödinger Equations. <i>Springer Tracts in Modern Physics</i> , 2018, , 493-512.  | 0.1 | 0         |