

# Diana Serrano

## List of Publications by Year in descending order

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27  
papers

481  
citations

687363

13  
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677142

22  
g-index

28  
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28  
docs citations

28  
times ranked

498  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultra-narrow optical linewidths in rare-earth molecular crystals. <i>Nature</i> , 2022, 603, 241-246.	27.8	54
2	Ytterbium sensitization in KY3F10: Pr <sup>3+</sup> , Yb <sup>3+</sup> for silicon solar cells efficiency enhancement. <i>Optical Materials</i> , 2011, 33, 1028-1031.	3.6	50
3	All-optical control of long-lived nuclear spins in rare-earth doped nanoparticles. <i>Nature Communications</i> , 2018, 9, 2127.	12.8	45
4	Dynamic control of Purcell enhanced emission of erbium ions in nanoparticles. <i>Nature Communications</i> , 2021, 12, 3570.	12.8	36
5	Ultrathin Eu- and Er-Doped Y <sub>2</sub> O <sub>3</sub> Films with Optimized Optical Properties for Quantum Technologies. <i>Journal of Physical Chemistry C</i> , 2019, 123, 13354-13364.	3.1	32
6	Highly efficient energy transfer in Pr <sup>3+</sup> , Yb <sup>3+</sup> codoped CaF <sub>2</sub> for luminescent solar converters. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011, 28, 1760.	2.1	29
7	Pr <sup>3+</sup> cluster management in CaF <sub>2</sub> by codoping with Lu <sup>3+</sup> or Yb <sup>3+</sup> for visible lasers and quantum down-converters. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2012, 29, 1854.	2.1	26
8	Measurement of linewidths and permanent electric dipole moment change of the Ce <sup>3+</sup> transition in Y <sub>2</sub> O <sub>3</sub> . <i>Physical Review B</i> , 2019, 100, 020401.	3.2	24
9	High-fidelity readout scheme for rare-earth solid-state quantum computing. <i>Physical Review A</i> , 2015, 92, 022305.	2.5	23
10	Two-step quantum cutting efficiency in Pr <sup>3+</sup> /Yb <sup>3+</sup> codoped KY <sub>3</sub> F <sub>10</sub> . <i>Physical Review B</i> , 2019, 100, 020401.	3.2	21
11	Optical spin-state polarization in a binuclear europium complex towards molecule-based coherent light-spin interfaces. <i>Nature Communications</i> , 2021, 12, 2152.	12.8	21
12	Controlled size reduction of rare earth doped nanoparticles for optical quantum technologies. <i>RSC Advances</i> , 2018, 8, 37098-37104.	3.6	16
13	Coherent optical and spin spectroscopy of nanoscale Pr <sup>3+</sup> ions. <i>Physical Review B</i> , 2019, 100, 020401.	3.2	16
14	Defect Engineering for Quantum Grade Rare-Earth Nanocrystals. <i>ACS Nano</i> , 2020, 14, 9953-9962.	14.6	13
15	A Frequency-Multiplexed Coherent Electro-optic Memory in Rare Earth Doped Nanoparticles. <i>Nano Letters</i> , 2020, 20, 7087-7093.	9.1	11
16	Chemically vapor deposited Eu <sup>3+</sup> :Y <sub>2</sub> O <sub>3</sub> thin films as a material platform for quantum technologies. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	11
17	High-connectivity quantum processor nodes using single-ion qubits in rare-earth-ion-doped crystals. <i>Physical Review A</i> , 2022, 105, .	2.5	9
18	Impact of the ion-ion energy transfer on quantum computing schemes in rare-earth doped solids. <i>Journal of Luminescence</i> , 2014, 151, 93-99.	3.1	7

#	ARTICLE	IF	CITATIONS
19	Amyloid- $\beta$ Peptide-Lipid Bilayer Interaction Investigated by Supercritical Angle Fluorescence. ACS Chemical Neuroscience, 2019, 10, 4776-4786.	3.5	7
20	Satellite line mapping in Eu <sup>3+</sup> -Ce <sup>3+</sup> and Pr <sup>3+</sup> -Ce <sup>3+</sup> codoped Y <sub>2</sub> SiO <sub>5</sub> . Journal of Luminescence, 2016, 170, 102-107.	3.1	6
21	Supercritical angle Raman microscopy: a surface-sensitive nanoscale technique without field enhancement. Light: Science and Applications, 2017, 6, e17066-e17066.	16.6	6
22	Improving the Luminescent Properties of Atomic Layer Deposition Eu:Y <sub>2</sub> O <sub>3</sub> Thin Films through Optimized Thermal Annealing. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900909.	1.8	6
23	Harnessing Atomic Layer Deposition and Diffusion to Spatially Localize Rare-Earth Ion Emitters. Journal of Physical Chemistry C, 2020, 124, 19725-19735.	3.1	4
24	Controlling the interfacial reactions and environment of rare-earth ions in thin oxide films towards wafer-scalable quantum technologies. Materials Advances, 2022, 3, 300-311.	5.4	4
25	Structure Analysis of Amyloid Aggregates at Lipid Bilayers by Supercritical Angle Raman Microscopy. Analytical Chemistry, 2020, 92, 4963-4970.	6.5	2
26	Visible to infrared down conversion in rare-earth doped fluorides for luminescent solar converters. , 2011, , .		1
27	High-resolution transient and permanent spectral hole burning in Ce <sup>3+</sup> :Y <sub>2</sub> SiO <sub>5</sub> at liquid helium temperatures. Physical Review B, 2016, 93, .	3.2	1