Gianluca Grimaldi

List of Publications by Year
in descending order

21 papers	704 citations	687363 13 h-index	752698 20 g-index
21 all docs	21 docs citations	21 times ranked	1203 citing authors

#	Article	IF	Citations
1	Finding and Fixing Traps in IIâ€“VI and IIIâ€“V Colloidal Quantum Dots: The Importance of Z-Type Ligand Passivation. Journal of the American Chemical Society, 2018, 140, 15712-15723.	13.7	166
2	Spectroscopic Evidence for the Contribution of Holes to the Bleach of Cd-Chalcogenide Quantum Dots. Nano Letters, 2019, 19, 3002-3010.	9.1	72
3	Grain Size Influences Activation Energy and Migration Pathways in MAPbBr₃ Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2021, 12, 2423-2428.	4.6	71
4	Tunable Quantum Confinement in Ultrathin, Optically Active Semiconductor Nanowires Via Reverseâ€Reaction Growth. Advanced Materials, 2015, 27, 2195-2202.	21.0	50
5	Hot-electron transfer in quantum-dot heterojunction films. Nature Communications, 2018, 9, 2310.	12.8	48
6	Crystal Phase Quantum Dots in the Ultrathin Core of GaAsâ€“AlGaAs Coreâ€“Shell Nanowires. Nano Letters, 2015, 15, 7544-7551.	9.1	47
7	Spectroelectrochemical Signatures of Surface Trap Passivation on CdTe Nanocrystals. Chemistry of Materials, 2018, 30, 8052-8061.	6.7	44
8	Highly Photoconductive InP Quantum Dots Films and Solar Cells. ACS Applied Energy Materials, 2018, 1, 6569-6576.	5.1	40
9	Electrochemical Modulation of the Photophysics of Surface-Localized Trap States in Core/Shell/(Shell) Quantum Dot Films. Chemistry of Materials, 2019, 31, 8484-8493.	6.7	35
10	Atomic Layer Deposition of ZnO on InP Quantum Dot Films for Charge Separation, Stabilization, and Solar Cell Formation. Advanced Materials Interfaces, 2020, 7, 1901600.	3.7	23
11	Quantitative Electrochemical Control over Optical Gain in Quantum-Dot Solids. ACS Nano, 2021, 15, 377-386.	14.6	22
12	Asymmetric Optical Transitions Determine the Onset of Carrier Multiplication in Lead Chalcogenide Quantum Confined and Bulk Crystals. ACS Nano, 2018, 12, 4796-4802.	14.6	16
13	Reduced Barrier for Ion Migration in Mixed-Halide Perovskites. ACS Applied Energy Materials, 2021, 4, 13431-13437.	5.1	16
14	Ultrafast Charge Transfer and Upconversion in Zinc Î²â€Tetraaminophthalocyanineâ€Functionalized PbS Nanostructures Probed by Transient Absorption Spectroscopy. Angewandte Chemie - International Edition, 2017, 56, 14061-14065.	13.8	12
15	Selective antimony reduction initiating the nucleation and growth of InSb quantum dots. Nanoscale, 2018, 10, 11110-11116.	5.6	11
16	Engineering the Band Alignment in QD Heterojunction Films via Ligand Exchange. Journal of Physical Chemistry C, 2019, 123, 29599-29608.	3.1	8
17	Accelerated Hot-Carrier Cooling in MAPbI₃ Perovskite by Pressure-Induced Lattice Compression. Journal of Physical Chemistry Letters, 2021, 12, 4118-4124.	4.6	8
18	Ultrafast Charge Transfer and Upconversion in Zinc Î²â€Tetraaminophthalocyanineâ€Functionalized PbS Nanostructures Probed by Transient Absorption Spectroscopy. Angewandte Chemie, 2017, 129, 14249-14253.	2.0	6

#	Article	IF	Citations
19	Model To Determine a Distinct Rate Constant for Carrier Multiplication from Experiments. ACS Applied Energy Materials, 2019, 2, 721-728.	5.1	4
20	Microstructuring of 2D perovskites via ion-exchange fabrication. Applied Physics Letters, 2021, 119, 223102.	3.3	3
21	Quantitative electrochemical control over optical gain in colloidal quantum-dot and quantum-well solids. , 2020, , .		2