Roman Vaxenburg

List of Publications by Year
in descending order

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25 papers	1,664 citations	471371 17 h-index	610775 24 g-index
25 all docs	25 docs citations	25 times ranked	2970 citing authors

#	Article	IF	Citations
1	Bright triplet excitons in caesium lead halide perovskites. Nature, 2018, 553, 189-193.	13.7	716
2	Exciton Fine Structure in Perovskite Nanocrystals. Nano Letters, 2019, 19, 4068-4077.	4.5	128
3	Core/Shell PbSe/PbS QDs TiO₂ Heterojunction Solar Cell. Advanced Functional Materials, 2013, 23, 2736-2741.	7.8	99
4	Biexciton Auger Recombination in CdSe/CdS Core/Shell Semiconductor Nanocrystals. Nano Letters, 2016, 16, 2503-2511.	4.5	71
5	Quantum Dotâ€“Peptideâ€“Fullerene Bioconjugates for Visualization of in Vitro and in Vivo Cellular Membrane Potential. ACS Nano, 2017, 11, 5598-5613.	7.3	68
6	Composition-Tunable Optical Properties of Colloidal IVâ^'VI Quantum Dots, Composed of Core/Shell Heterostructures with Alloy Components. ACS Nano, 2010, 4, 6547-6556.	7.3	62
7	Nonradiative Auger Recombination in Semiconductor Nanocrystals. Nano Letters, 2015, 15, 2092-2098.	4.5	62
8	Anomalous Independence of Multiple Exciton Generation on Different Group IVâ^'VI Quantum Dot Architectures. Nano Letters, 2011, 11, 1623-1629.	4.5	61
9	Dynamics of Intraband and Interband Auger Processes in Colloidal Coreâ€“Shell Quantum Dots. ACS Nano, 2015, 9, 10366-10376.	7.3	52
10	The role of polarization fields in Auger-induced efficiency droop in nitride-based light-emitting diodes. Applied Physics Letters, 2013, 103, .	1.5	46
11	PbSe-Based Colloidal Core/Shell Heterostructures for Optoelectronic Applications. Materials, 2014, 7, 7243-7275.	1.3	43
12	Small-Sized PbSe/PbS Core/Shell Colloidal Quantum Dots. Chemistry of Materials, 2012, 24, 4417-4423.	3.2	42
13	Size-Dependent Energy Levels of InSb Quantum Dots Measured by Scanning Tunneling Spectroscopy. ACS Nano, 2015, 9, 725-732.	7.3	37
14	Significance of Small-Sized PbSe/PbS Core/Shell Colloidal Quantum Dots for Optoelectronic Applications. Journal of Physical Chemistry C, 2014, 118, 17001-17009.	1.5	33
15	Alloy and heterostructure architectures as promising tools for controlling electronic properties of semiconductor quantum dots. Physical Review B, 2012, 85, .	1.1	32
16	Dielectric Confinement and Excitonic Effects in Two-Dimensional Nanoplatelets. ACS Nano, 2020, 14, 8257-8265.	7.3	29
17	Tuning of electronic properties in IVâ€“VI colloidal nanostructures by alloy composition and architecture. Nanoscale, 2013, 5, 7724.	2.8	27
18	PbSe/CdSe Thin-Shell Colloidal Quantum Dots. Zeitschrift Fur Physikalische Chemie, 2015, 229, 3-21.	1.4	13

#	Article	IF	Citations
19	Influence of Alloying on the Optical Properties of IVâ€“VI Nanorods. Journal of Physical Chemistry C, 2012, 116, 18983-18989.	1.5	12
20	Quantum Confinement Regimes in CdTe Nanocrystals Probed by Single Dot Spectroscopy: From Strong Confinement to the Bulk Limit. ACS Nano, 2015, 9, 7840-7845.	7.3	10
21	Dynamic cues for whisker-based object localization: An analytical solution to vibration during active whisker touch. PLoS Computational Biology, 2018, 14, e1006032.	1.5	10
22	Temperature dependence of the groundâ€state exciton in PbSe core and relevant coreâ€shell colloidal quantum dot structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2656-2659.	0.8	5
23	The Influence of Alloy Composition on the Electronic Properties of IVâ€“VI Core/Shell Colloidal Heterostructures. Israel Journal of Chemistry, 2012, 52, 1037-1052.	1.0	5
24	Photoluminescence properties of PbSe/PbS coreâ€shell quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2716-2718.	0.8	1
25	Optical Properties of Alloyed PbSexS1-x Nanorods. Materials Research Society Symposia Proceedings, 2012, 1390, 7.	0.1	0