Francesco Quochi

List of Publications by Year
in descending order

117 papers	4,162 citations	117625 34 h-index	118850 62 g-index
117 all docs	117 docs citations	117 times ranked	6198 citing authors

#	Article	IF	Citations
1	Third-order nonlinearities in silicon at telecom wavelengths. Applied Physics Letters, 2003, 82, 2954-2956.	3.3	566
2	Correlated electronâ€“hole plasma in organometal perovskites. Nature Communications, 2014, 5, 5049.	12.8	497
3	Optical determination of Shockley-Read-Hall and interface recombination currents in hybrid perovskites. Scientific Reports, 2017, 7, 44629.	3.3	175
4	Absorption F-Sum Rule for the Exciton Binding Energy in Methylammonium Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2015, 6, 4566-4572.	4.6	149
5	Excited State Properties of Hybrid Perovskites. Accounts of Chemical Research, 2016, 49, 166-173.	15.6	144
6	Solutionâ€Processable Nearâ€IR Photodetectors Based on Electron Transfer from PbS Nanocrystals to Fullerene Derivatives. Advanced Materials, 2009, 21, 683-687.	21.0	121
7	Gain amplification and lasing properties of individual organic nanofibers. Applied Physics Letters, 2006, 88, 041106.	3.3	120
8	Random laser action in self-organized para-sexiphenyl nanofibers grown by hot-wall epitaxy. Applied Physics Letters, 2004, 84, 4454-4456.	3.3	103
9	One-Dimensional Random Lasing in a Single Organic Nanofiber. Journal of Physical Chemistry B, 2005, 109, 21690-21693.	2.6	84
10	Excitonâ€“Exciton Interaction and Optical Gain in Colloidal CdSe/CdS Dot/Rod Nanocrystals. Advanced Materials, 2009, 21, 4942-4946.	21.0	82
11	Structure and Emission Properties of Er3Q9(Q = 8-Quinolinolate). Inorganic Chemistry, 2005, 44, 840-842.	4.0	81
12	The role of excitons in 3D and 2D lead halide perovskites. Journal of Materials Chemistry C, 2019, 7, 12006-12018.	5.5	80
13	Strongly Driven Semiconductor Microcavities: From the Polariton Doublet to an ac Stark Triplet. Physical Review Letters, 1998, 80, 4733-4736.	7.8	72
14	Can Trihalide Lead Perovskites Support Continuous Wave Lasing?. Advanced Optical Materials, 2015, 3, 1557-1564.	7.3	72
15	Highly Emissive Nanostructured Thin Films of Organic Hostâ€“Guests for Energy Conversion. ChemPhysChem, 2009, 10, 647-653.	2.1	68
16	Near infrared light emission quenching in organolanthanide complexes. Journal of Applied Physics, 2006, 99, 053520.	2.5	67
17	Colloidal Bi₂S₃ Nanocrystals: Quantum Size Effects and Midgap States. Advanced Functional Materials, 2014, 24, 3341-3350.	14.9	65
18	New Insights on Nearâ€Infrared Emitters Based on Erâ€quinolinolate Complexes: Synthesis, Characterization, Structural, and Photophysical Properties. Advanced Functional Materials, 2007, 17, 2365-2376.	14.9	60

#	Article	IF	Citations
19	Optical properties of strained antimonide-based heterostructures. Journal of Applied Physics, 2003, 94, 1506-1512.	2.5	55
20	Size-Dependent Electron Transfer from Colloidal PbS Nanocrystals to Fullerene. Journal of Physical Chemistry Letters, 2010, 1, 1149-1154.	4.6	54
21	Direct or Indirect Bandgap in Hybrid Lead Halide Perovskites?. Advanced Optical Materials, 2018, 6, 1701254.	7.3	54
22	Coherent exciton-photon dynamics in semiconductor microcavities:The influence of inhomogeneous broadening. Physical Review B, 1997, 55, 7084-7090.	3.2	53
23	Novel Er³⁺ Perfluorinated Complexes for Broadband Sensitized Near Infrared Emission. Chemistry of Materials, 2009, 21, 128-135.	6.7	52
24	Random lasers based on organic epitaxial nanofibers. Journal of Optics (United Kingdom), 2010, 12, 024003.	2.2	48
25	Light-Induced Charged and Trap States in Colloidal Nanocrystals Detected by Variable Pulse Rate Photoluminescence Spectroscopy. ACS Nano, 2013, 7, 229-238.	14.6	44
26	Organic Nanostructured Host-Guest Materials Containing Three Dyes. Advanced Materials, 2004, 16, 1716-1721.	21.0	43
27	Hydrophilicity and Water Contact Angle on Methylammonium Lead Iodide. Advanced Materials Interfaces, 2019, 6, 1801173.	3.7	43
28	Crossover from Exciton to Biexciton Polaritons in Semiconductor Microcavities. Physical Review Letters, 2000, 85, 385-388.	7.8	42
29	Coherent random lasing in the deep blue from self-assembled organic nanofibers. Journal of Applied Physics, 2006, 99, 034305.	2.5	42
30	Organicâˆ'Organic Heteroepitaxy of Red-, Green-, and Blue-Emitting Nanofibers. ACS Nano, 2010, 4, 6244-6250.	14.6	42
31	Charged excitons, Auger recombination and optical gain in CdSe/CdS nanocrystals. Nanotechnology, 2012, 23, 015201.	2.6	41
32	Optically Pumped Lasing from Single Crystals of a Cyanoâ€Substituted Thiophene/Phenylene Coâ€Oligomer. Advanced Optical Materials, 2014, 2, 529-534.	7.3	38
33	Continuous-wave operation of a 1.3-/spl mu/m GaAsSb-GaAs quantum-well vertical-cavity surface-emitting laser at room temperature. IEEE Photonics Technology Letters, 2001, 13, 921-923.	2.5	37
34	Perovskite Excitonics: Primary Exciton Creation and Crossover from Free Carriers to a Secondary Exciton Phase. Advanced Optical Materials, 2018, 6, 1700839.	7.3	36
35	Nanosheets of Two-Dimensional Neutral Coordination Polymers Based on Near-Infrared-Emitting Lanthanides and a Chlorocyananilate Ligand. Chemistry of Materials, 2018, 30, 6575-6586.	6.7	36
36	Color Tuning of Nanofibers by Periodic Organicâ€“Organic Hetero-Epitaxy. ACS Nano, 2012, 6, 4629-4638.	14.6	35

#	Article	IF	Citations
37	Ultrafast carrier dynamics of resonantly excited 1.3-Î¼m InAs/GaAs self-assembled quantum dots. Physica B: Condensed Matter, 2002, 314, 263-267.	2.7	30
38	Implementation of electro-optic spectral shearing interferometry for ultrashort pulse characterization. Optics Letters, 2003, 28, 2264.	3.3	30
39	Heteroleptic NIR-Emitting Yb^{III}/Anilate-Based Neutral Coordination Polymer Nanosheets for Solvent Sensing. ACS Applied Nano Materials, 2020, 3, 94-104.	5.0	29
40	Ultrafast Dynamics of Intersystem Crossing and Resonance Energy Transfer in Er(III)â^'Quinolinolate Complexes. Journal of Physical Chemistry Letters, 2010, 1, 2733-2737.	4.6	27
41	Ln₃Q₉ as a Molecular Framework for Ionâ€•Sizeâ€•Driven Assembly of Heterolanthanide (Nd, Er, Yb) Multiple Nearâ€•Infrared Emitters. Chemistry - A European Journal, 2015, 21, 3882-3885.	3.3	26
42	Layered Germanium Hybrid Perovskite Bromides: Insights from Experiments and Firstâ€•Principles Calculations. Advanced Functional Materials, 2019, 29, 1903528.	14.9	26
43	Direct observation of the excitonic ac Stark splitting in a quantum well. Physical Review B, 2000, 62, R16322-R16325.	3.2	25
44	Fully Efficient Direct Yb-to-Er Energy Transfer at Molecular Level in a Near-Infrared Emitting Heterometallic Trinuclear Quinolinolato Complex. Journal of Physical Chemistry Letters, 2013, 4, 3062-3066.	4.6	25
45	Coulomb and carrier-activation dynamics of resonantly excited InAs/GaAs quantum dots in two-color pump-probe experiments. Physical Review B, 2003, 67, .	3.2	24
46	Controlling Nd-to-Yb energy transfer through a molecular approach. Journal of Materials Chemistry C, 2015, 3, 11524-11530.	5.5	24
47	Extending the Lasing Wavelength Coverage of Organic Semiconductor Nanofibers by Periodic Organicâ€"Organic Heteroepitaxy. Advanced Optical Materials, 2013, 1, 117-122.	7.3	23
48	Low-threshold blue lasing in epitaxially grown para-sexiphenyl nanofibers. Journal of Luminescence, 2005, 112, 321-324.	3.1	21
49	Temperature Tuning of Nonlinear Exciton Processes in Selfâ€•Assembled Oligophenyl Nanofibers under Laser Action. Advanced Materials, 2008, 20, 3017-3021.	21.0	21
50	Strong coherent gain from semiconductor microcavities in the regime of excitonic saturation. Physical Review B, 1999, 59, R15594-R15597.	3.2	20
51	Optical Gain Performance of Epitaxially Grown <i>para</i>â€•Sexiphenyl Films. Advanced Materials, 2007, 19, 2252-2256.	21.0	19
52	Light Conversion Control in NIR-Emissive Optical Materials Based on Heterolanthanide Er_{<i>x</i>}Yb_{3â€"<i>x</i>} Quinolinolato Molecular Components. Chemistry of Materials, 2015, 27, 4082-4092.	6.7	19
53	Room temperature operation of GaAsSb/GaAs quantum well VCSELs at 1.29 [micro sign]m. Electronics Letters, 2000, 36, 2075.	1.0	18
54	Tailoring functionality through synthetic strategy in heterolanthanide assemblies. Inorganic Chemistry Frontiers, 2015, 2, 213-222.	6.0	17

#	Article	IF	Citations
55	Ag/In leadâ€free double perovskites. EcoMat, 2020, 2, e12017.	11.9	16
56	Population Saturation in Trivalent Erbium Sensitized by Organic Molecular Antennae. Journal of Physical Chemistry Letters, 2010, 1, 141-144.	4.6	15
57	Dual Emitting [Yb(5,7ClQ)₂(H5,7ClQ)₂Cl]: Chemical and Photophysical Properties. ChemPlusChem, 2012, 77, 240-248.	2.8	15
58	Charge separation in Pt-decorated CdSe@CdS octapod nanocrystals. Nanoscale, 2014, 6, 2238-2243.	5.6	15
59	Self-Assembled Lead Halide Perovskite Nanocrystals in a Perovskite Matrix. ACS Energy Letters, 2017, 2, 769-775.	17.4	15
60	Reversible tuning of luminescence and magnetism in a structurally flexible erbiumâ€“anilato MOF. Chemical Science, 2022, 13, 7419-7428.	7.4	15
61	Growth and optical properties of GaAsSb quantum wells for 1.3 Î¼m VCSELs. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 1948.	1.6	14
62	Optical Sensitivity Gain in Silica-Coated Plasmonic Nanostructures. Journal of Physical Chemistry Letters, 2014, 5, 2935-2940.	4.6	14
63	Polaron Plasma in Equilibrium with Bright Excitons in 2D and 3D Hybrid Perovskites. Advanced Optical Materials, 2021, 9, 2100295.	7.3	14
64	Speed Dependence of Pressure Broadening in Molecular Rotational Spectra Using a Novel Technique. Physical Review Letters, 1995, 74, 3356-3359.	7.8	13
65	An active electron polarized scintillating GSO target for neutrino physics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 694, 335-340.	1.6	13
66	Efficient Exciton Diffusion and Resonance-Energy Transfer in Multilayered Organic Epitaxial Nanofibers. Journal of Physical Chemistry C, 2015, 119, 15689-15697.	3.1	12
67	Doping porous silicon with erbium: pores filling as a method to limit the Er-clustering effects and increasing its light emission. Scientific Reports, 2017, 7, 5957.	3.3	12
68	Silica solâ€“gel glasses incorporating dual-luminescent Yb quinolinolato complex: processing, emission and photosensitising properties of the â€˜antennaâ€™ ligand. Dalton Transactions, 2012, 41, 13147.	3.3	10
69	Bifacial Diffuse Absorptance of Semitransparent Microstructured Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 10021-10027.	8.0	10
70	Colloidal synthesis and characterization of Bi₂S₃nanoparticles for photovoltaic applications. Journal of Physics: Conference Series, 2014, 566, 012017.	0.4	9
71	The contribution of biexcitons to the four-wave mixing response of quantum wells with inhomogeneously broadened transitions. Semiconductor Science and Technology, 1997, 12, 300-308.	2.0	8
72	Theory of the excitonic Mollow spectrum in semiconductors. Solid State Communications, 1998, 107, 715-718.	1.9	8

#	Article	IF	Citations
73	Ultrafast carrier activation in resonantly excited 1.3 Î¼m InAs/GaAs quantum dots at room temperature. Physical Review B, 2002, 65, .	3.2	8
74	Interface Properties of Organic <i>para</i>-Hexaphenyl/Î±-Sexithiophene Heterostructures Deposited on Highly Oriented Pyrolytic Graphite. Langmuir, 2013, 29, 14444-14450.	3.5	8
75	Combined Experimental/Theoretical Study on the Luminescent Properties of Homoleptic/Heteroleptic Erbium(III) Anilate-Based 2D Coordination Polymers. Inorganic Chemistry, 2021, 60, 17765-17774.	4.0	8
76	Heteroepitaxy of Organic Nanofibers: Example of Ternaphthalene on <i>p</i>-Hexaphenyl. Crystal Growth and Design, 2014, 14, 5719-5728.	3.0	7
77	A convenient preparation of nano-powders of Y2O3, Y3Al5O12 and Nd:Y3Al5O12 and study of the photoluminescent emission properties of the neodymium doped oxide. Inorganica Chimica Acta, 2018, 470, 149-157.	2.4	7
78	Long-lived electrets and lack of ferroelectricity in methylammonium lead bromide CH₃NH₃PbBr₃ ferroelastic single crystals. Physical Chemistry Chemical Physics, 2021, 23, 3233-3245.	2.8	7
79	Direct measurement of radiative decay rates in metal halide perovskites. Energy and Environmental Science, 2022, 15, 1211-1221.	30.8	7
80	Direct observation of an ac Stark splitting in semiconductor microcavities excited above the continuum onset. Physical Review B, 2000, 61, R5113-R5116.	3.2	6
81	Silicon-based fluorescent platforms for copper(<scp>ii</scp>) detection in water. RSC Advances, 2021, 11, 15557-15564.	3.6	6
82	Blue emitting self-assembled nano-fibers of para-sexiphenyl grown by hot wall epitaxy. Physica Status Solidi A, 2004, 201, 2288-2293.	1.7	5
83	The Importance of Disorder in Very High Quality Semiconductor Microcavities. Physica Status Solidi A, 2000, 178, 149-153.	1.7	4
84	High-speed dynamics of GaAsSb vertical-cavity lasers. IEEE Photonics Technology Letters, 2002, 14, 438-440.	2.5	4
85	In Situ Production of Polymerâ€Capped Silver Nanoparticles for Optical Biosensing. Macromolecular Symposia, 2009, 283â€“284, 167-173.	0.7	4
86	Intrinsic non-linearities in exciton-cavity-coupled systems. Physica B: Condensed Matter, 1999, 272, 472-475.	2.7	3
87	Blue emitting self-assembled nano-crystals of para-sexiphenyl grown by hot wall epitaxy. Microelectronics Journal, 2005, 36, 237-240.	2.0	3
88	Synergic combination of the solâ€“gel method with dip coating for plasmonic devices. Beilstein Journal of Nanotechnology, 2015, 6, 500-507.	2.8	3
89	Paving the way for solutionâ€•processable perovskite lasers. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 1028-1033.	0.8	3
90	Photoluminescence emission induced by localized states in halide-passivated colloidal two-dimensional WS₂ nanoflakes. Journal of Materials Chemistry C, 2021, 9, 2398-2407.	5.5	3

#	Article	IF	Citations
91	Exciton-Photon Dynamics in Weakly and Strongly Excited Semiconductor Microcavities. Physica Status Solidi (B): Basic Research, 1998, 206, 375-386.	1.5	2
92	Thickness controlled sol-gel silica films for plasmonic bio-sensing devices. , 2014, , .		2
93	Plasmonic Structures for Sensing and Emitting Devices. Journal of Physics: Conference Series, 2014, 566, 012015.	0.4	2
94	Optical Stark Effect and Coherent Gain of Excitons in a Semiconductor Microcavity. Physica Status Solidi A, 1997, 164, 23-27.	1.7	1
95	Coherent excitonâ€"photon dynamics in high-quality IIâ€"VI semiconductor microcavities. Journal of Crystal Growth, 1998, 184-185, 754-757.	1.5	1
96	Crossover from Exciton to Biexciton Cavity Polaritons. Physica Status Solidi (B): Basic Research, 2000, 221, 157-162.	1.5	1
97	Femtosecond dynamics and non-linearities ofÂexcitonâ€"photon coupling in semiconductor microstructures. Comptes Rendus Physique, 2001, 2, 1439-1451.	0.1	1
98	White fluorescent nano-fibers prepared by periodic organic hetero-epitaxy. Proceedings of SPIE, 2013, , .	0.8	1
99	Sol-gel silica films embedding NIR- emitting Yb-quinolinolate complexes. , 2014, , .		1
100	Multi-NIR-Emissive Materials based on Heterolanthanide Molecular Assemblies. MRS Advances, 2016, 1, 2683-2688.	0.9	1
101	The Microcavity AC Stark Triplet: Excitation in the Exciton Continuum. Physica Status Solidi (B): Basic Research, 2000, 221, 127-131.	1.5	0
102	Net Coherent Optical Gain in Strongly Pumped Semiconductor Microcavities. Physica Status Solidi A, 2000, 178, 139-143.	1.7	0
103	Direct observation of the excitonic ac Stark splitting in a semiconductor quantum well. , 0, , .		0
104	Fast and ultrafast response of aligned organic nanofibers - towards organic nanolasers. , 2005, , .		0
105	Organic nanofibers as new media for lasing, waveguiding, and photonic sensing. , 2006, , .		0
106	Diffusion-limited aggregation in dry nanocrystal films. Materials Research Society Symposia Proceedings, 2012, 1411, 81.	0.1	0
107	Auger Recombination of Biexcitons and Charged Excitons in CdSe/CdS core/shell Nanocrystals. Materials Research Society Symposia Proceedings, 2012, 1409, 13.	0.1	0
108	Organic Nanofibers: Extending the Lasing Wavelength Coverage of Organic Semiconductor Nanofibers by Periodic Organicâ€"Organic Heteroepitaxy (Advanced Optical Materials 2/2013). Advanced Optical Materials, 2013, 1, 116-116.	7.3	0

#	Article	IF	Citations
109	Organicâ€"Organic Heteroepitaxyâ€"The Method of Choice to Tune Optical Emission of Organic Nano-fibers?. Springer Series in Materials Science, 2013, , 49-78.	0.6	0
110	Excited-State Dynamics and Laser Action in Epitaxial Organic Nanofibers. Springer Series in Materials Science, 2013, , 231-249.	0.6	0
111	Reversible Light-Induced On-Off Switching of Charge Traps in Quantum Dots Probe by Variable-Pulse-Rate Photoluminescence Spectroscopy.. Materials Research Society Symposia Proceedings, 2013, 1509, 1.	0.1	0
112	Multiband Laser Action from Organic-Organic Heteroepitaxial Nanofibers. Materials Research Society Symposia Proceedings, 2014, 1632, 1.	0.1	0
113	Plasmonic Structures for Near Infrared Applications. Materials Research Society Symposia Proceedings, 2014, 1629, 1.	0.1	0
114	Perovskites photophysics: Half-organic, half-inorganic and a quarter of magic. , 2017, , .		0
115	X-ray detection by direct modulation of losses in a laser cavity. Applied Physics Letters, 2020, 117, 234101.	3.3	0
116	Ultrafast Optical Spectroscopy Techniques Applied to Colloidal Nanocrystals. NATO Science for Peace and Security Series B: Physics and Biophysics, 2017, , 483-485.	0.3	0
117	Optical Gain and Random Lasing in Self-Assembled Organic Nanofibers. , 2008, , 239-260.		0