Giancarlo Soavi

List of Publications by Year
in descending order

55 papers	1,636 citations	236833 25 h-index	289141 40 g-index
59 all docs	59 docs citations	59 times ranked	2793 citing authors

#	Article	IF	Citations
1	Broadband, electrically tunable third-harmonic generation in graphene. Nature Nanotechnology, 2018, 13, 583-588.	15.6	211
2	Out-of-plane heat transfer in van der Waals stacks through electronâ€“hyperbolic phonon coupling. Nature Nanotechnology, 2018, 13, 41-46.	15.6	128
3	Snapshots of the retarded interaction of charge carriers with ultrafast fluctuations in cuprates. Nature Physics, 2015, 11, 421-426.	6.5	92
4	Excitonâ€“exciton annihilation and biexciton stimulated emission in graphene nanoribbons. Nature Communications, 2016, 7, 11010.	5.8	85
5	Intravalley Spinâ€“Flip Relaxation Dynamics in Single-Layer WS₂. Nano Letters, 2018, 18, 6882-6891.	4.5	82
6	Hot carriers in graphene â€“ fundamentals and applications. Nanoscale, 2021, 13, 8376-8411.	2.8	75
7	Charge Photogeneration in Donorâ€“Acceptor Conjugated Materials: Influence of Excess Excitation Energy and Chain Length. Journal of the American Chemical Society, 2013, 135, 4282-4290.	6.6	69
8	Control of Crystal Symmetry Breaking with Halogen-Substituted Benzylammonium in Layered Hybrid Metal-Halide Perovskites. Journal of the American Chemical Society, 2020, 142, 5060-5067.	6.6	65
9	Multispecies and individual gas molecule detection using Stokes solitons in a graphene over-modal microresonator. Nature Communications, 2021, 12, 6716.	5.8	64
10	All-optical polarization and amplitude modulation of second-harmonic generation in atomically thin semiconductors. Nature Photonics, 2021, 15, 837-842.	15.6	59
11	Broadly tunable ultrafast pump-probe system operating at multi-kHz repetition rate. Journal of Optics (United Kingdom), 2018, 20, 014005.	1.0	49
12	Ultrafast pseudospin dynamics in graphene. Physical Review B, 2015, 92, .	1.1	48
13	Strongly Coupled Coherent Phonons in Single-Layer MoS₂. ACS Nano, 2020, 14, 5700-5710.	7.3	44
14	Electrically Tunable Four-Wave-Mixing in Graphene Heterogeneous Fiber for Individual Gas Molecule Detection. Nano Letters, 2020, 20, 6473-6480.	4.5	42
15	Excitonâ€“phonon coupling strength in single-layer MoSe2 at room temperature. Nature Communications, 2021, 12, 954.	5.8	35
16	Coherent Longitudinal Acoustic Phonons in Three-Dimensional Supracrystals of Cobalt Nanocrystals. Nano Letters, 2013, 13, 4914-4919.	4.5	34
17	Ultrafast Charge Photogeneration in Semiconducting Carbon Nanotubes. Journal of Physical Chemistry C, 2013, 117, 10849-10855.	1.5	33
18	High energetic excitons in carbon nanotubes directly probe charge-carriers. Scientific Reports, 2015, 5, 9681.	1.6	30

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19	Size and nanocrystallinity controlled gold nanocrystals: synthesis, electronic and mechanical properties. Nanoscale, 2015, 7, 3237-3246.	2.8	30
20	Nonlinear co-generation of graphene plasmons for optoelectronic logic operations. Nature Communications, 2022, 13, .	5.8	30
21	Hot Electrons Modulation of Third-Harmonic Generation in Graphene. ACS Photonics, 2019, 6, 2841-2849.	3.2	29
22	Ultrafast Photophysics of Singleâ€Walled Carbon Nanotubes. Advanced Optical Materials, 2016, 4, 1670-1688.	3.6	28
23	Ultrasensitive Characterization of Mechanical Oscillations and Plasmon Energy Shift in Gold Nanorods. ACS Nano, 2016, 10, 2251-2258.	7.3	27
24	Weak Distance Dependence of Hot-Electron-Transfer Rates at the Interface between Monolayer MoS₂ and Gold. ACS Nano, 2021, 15, 819-828.	7.3	27
25	Wavelength tunable soliton rains in a nanotube-mode locked Tm-doped fiber laser. Applied Physics Letters, 2018, 113, .	1.5	26
26	Low-Loss Integrated Nanophotonic Circuits with Layered Semiconductor Materials. Nano Letters, 2021, 21, 2709-2718.	4.5	24
27	Wideâ€Bandgap Double Perovskites with Multiple Longitudinalâ€Optical Phonon Scattering. Advanced Functional Materials, 2022, 32, .	7.8	20
28	Photocatalytic activity of exfoliated graphiteâ€“TiO₂ nanoparticle composites. Nanoscale, 2019, 11, 19301-19314.	2.8	18
29	Optoelectronic mixing with high-frequency graphene transistors. Nature Communications, 2021, 12, 2728.	5.8	18
30	Parametric Nonlinear Optics with Layered Materials and Related Heterostructures. Laser and Photonics Reviews, 2022, 16, .	4.4	16
31	Stimulated Emission Properties of Fluorophores by CW-STED Single Molecule Spectroscopy. Journal of Physical Chemistry B, 2013, 117, 16405-16415.	1.2	14
32	Structure and dynamics of the membrane attaching nitric oxide transporter nitrophorin 7. F1000Research, 0, 4, 45.	0.8	13
33	Electrically Tunable Nonequilibrium Optical Response of Graphene. ACS Nano, 2022, 16, 3613-3624.	7.3	13
34	Ultrafast Spectroscopy of Graphene-Protected Thin Copper Films. ACS Photonics, 2016, 3, 1508-1516.	3.2	8
35	Delayed electron relaxation in CdTe nanorods studied by spectral analysis of the ultrafast transient absorption. Chemical Physics, 2016, 471, 39-45.	0.9	8
36	Guided Assembly and Patterning of Intrinsically Fluorescent Amyloid Fibers with Long-Range Order. Nano Letters, 2021, 21, 938-945.	4.5	8

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37	Structure and dynamics of the membrane attaching nitric oxide transporter nitrophorin 7. F1000Research, 2015, 4, 45.	0.8	7
38	Below-gap excitation of semiconducting single-wall carbon nanotubes. Nanoscale, 2015, 7, 18337-18342.	2.8	5
39	Tunable broadband light emission from graphene. 2D Materials, 2021, 8, 035026.	2.0	5
40	Tuning exciton recombination rates in doped transition metal dichalcogenides. Optical Materials: X, 2021, 12, 100097.	0.3	5
41	Electrostatic Tuning of the Ligand Binding Mechanism by Glu27 in Nitrophorin 7. Scientific Reports, 2018, 8, 10855.	1.6	4
42	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS2. , 2019, , .		3
43	Tuning nanowire lasers via hybridization with two-dimensional materials. Nanoscale, 2022, 14, 6822-6829.	2.8	2
44	Ultrafast Charge Photogeneration and Dynamics in Semiconducting Carbon Nanotubes. Springer Proceedings in Physics, 2015, , 360-362.	0.1	1
45	Advanced spectroscopies of graphene and 2D materials. , 2016, , .		0
46	Graphene electrically tuneable third harmonic generation. , 2018, , .		0
47	Hot Electrons Modulation of Third Harmonic Generation in Graphene. , 2019, , .		0
48	Gate-Tunable Ultrafast Optical Response of Single-Layer Graphene. , 2019, , .		0
49	Ultrafast charge photogeneration and dynamics in semiconducting carbon nanotubes. , 2014, , .		0
50	Ultrafast Pseudospin Dynamics in Graphene. , 2015, , .		0
51	Gate controllable ultrafast fiber lasers based on graphene. , 2018, , .		0
52	Active photonic integrated circuits combining Si3N4 microresonators with 2D materials for applications in the visible wavelength range. , 2018, , .		0
53	Broadband Wavelength Tunable Mode-Locked Tm-Doped Fiber Laser Based on Carbon Nanotubes. , 2018, , .		0
54	Electrically tunable four-wave-mixing in graphene heterogeneous fiber for individual gas molecule detection. , 2021, , .		0

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55	Electrical and all-optical modulation of harmonic generation in 2D materials. , 0, , .		0