Stéphane Kéna-Cohen

List of Publications by Year in descending order

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67 papers 5,375 citations

147726 31 h-index 60 g-index

68 all docs 68
docs citations

68 times ranked 5788 citing authors

#	Article	IF	CITATIONS
1	Strong light–matter coupling in two-dimensional atomic crystals. Nature Photonics, 2015, 9, 30-34.	15.6	865
2	Room-temperature polariton lasing in an organic single-crystal microcavity. Nature Photonics, 2010, 4, 371-375.	15.6	705
3	The road towards polaritonic devices. Nature Materials, 2016, 15, 1061-1073.	13.3	474
4	Nonlinear interactions in an organic polariton condensate. Nature Materials, 2014, 13, 271-278.	13.3	366
5	White Stacked Electrophosphorescent Organic Light-Emitting Devices Employing MoO3 as a Charge-Generation Layer. Advanced Materials, 2006, 18, 339-342.	11.1	356
6	Room-temperature superfluidity in a polariton condensate. Nature Physics, 2017, 13, 837-841.	6.5	250
7	Ultrastrongly Coupled Exciton–Polaritons in Metalâ€Clad Organic Semiconductor Microcavities. Advanced Optical Materials, 2013, 1, 827-833.	3.6	180
8	Optical control of room-temperature valley polaritons. Nature Photonics, 2017, 11, 491-496.	15.6	165
9	Strong Exciton-Photon Coupling in an Organic Single Crystal Microcavity. Physical Review Letters, 2008, 101, 116401.	2.9	142
10	Inverting singlet and triplet excited states using strong light-matter coupling. Science Advances, 2019, 5, eaax4482.	4.7	116
11	Optical and Structural Properties of Ultraâ€ŧhin Gold Films. Advanced Optical Materials, 2015, 3, 71-77.	3.6	111
12	Polariton-Assisted Singlet Fission in Acene Aggregates. Journal of Physical Chemistry Letters, 2018, 9, 1951-1957.	2.1	106
13	Interacting polariton fluids in a monolayer of tungsten disulfide. Nature Nanotechnology, 2018, 13, 906-909.	15.6	96
14	Observation of Quantum Interference in the Plasmonic Hong-Ou-Mandel Effect. Physical Review Applied, 2014, 1 , .	1.5	86
15	Quantum Statistics of Surface Plasmon Polaritons in Metallic Stripe Waveguides. Nano Letters, 2012, 12, 2504-2508.	4.5	84
16	Bose–Einstein Condensation of Exciton-Polaritons in Organic Microcavities. Annual Review of Physical Chemistry, 2020, 71, 435-459.	4.8	84
17	Tunable Third-Harmonic Generation from Polaritons in the Ultrastrong Coupling Regime. ACS Photonics, 2018, 5, 119-125.	3.2	71
18	Mid-infrared Polarized Emission from Black Phosphorus Light-Emitting Diodes. Nano Letters, 2020, 20, 3651-3655.	4. 5	69

#	Article	IF	Citations
19	Low-voltage polariton electroluminescence from an ultrastrongly coupled organic light-emitting diode. Applied Physics Letters, 2014, 104, .	1.5	61
20	Microscopic theory of polariton lasing via vibronically assisted scattering. Physical Review B, 2013, 88, .	1.1	55
21	Spatial Coherence and Stability in a Disordered Organic Polariton Condensate. Physical Review Letters, 2015, 115, 035301.	2.9	55
22	Enhanced nonlinear interaction of polaritons via excitonic Rydberg states in monolayer WSe2. Nature Communications, 2021, 12, 2269.	5.8	55
23	Confined Surface Plasmon–Polariton Amplifiers. Nano Letters, 2013, 13, 1323-1329.	4.5	52
24	Triplet harvesting in the polaritonic regime: A variational polaron approach. Journal of Chemical Physics, 2019, 151, .	1.2	50
25	Organic Photodiodes with an Extended Responsivity Using Ultrastrong Light–Matter Coupling. ACS Photonics, 2018, 5, 2921-2927.	3.2	49
26	Strong coupling and hybridization of Frenkel and Wannier-Mott excitons in an organic-inorganic optical microcavity. Physical Review B, 2006, 74, .	1.1	46
27	Efficient Solutionâ€Processed Hyperfluorescent OLEDs with Spectrally Narrow Emission at 840Ânm. Advanced Functional Materials, 2021, 31, .	7.8	46
28	Plasmonic Sinks for the Selective Removal of Long-Lived States. ACS Nano, 2011, 5, 9958-9965.	7.3	44
29	Spontaneous Emission inside a Hyperbolic Metamaterial Waveguide. ACS Photonics, 2017, 4, 2513-2521.	3.2	43
30	Dynamical Instability of a Nonequilibrium Exciton-Polariton Condensate. ACS Photonics, 2018, 5, 111-118.	3.2	41
31	Polariton Chemistry: Action in the Dark. ACS Central Science, 2019, 5, 386-388.	5. 3	36
32	Highly Efficient and Spectrally Narrow Nearâ€Infrared Fluorescent OLEDs Using a TADFâ€Sensitized Cyanine Dye. Advanced Optical Materials, 2019, 7, 1901144.	3.6	32
33	Nanoparticle-Assisted Stimulated-Emission-Depletion Nanoscopy. ACS Nano, 2012, 6, 5291-5296.	7.3	31
34	Giant Davydov splitting of the lower polariton branch in a polycrystalline tetracene microcavity. Physical Review B, 2008, 77, .	1.1	28
35	Alkali Metal Halide Salts as Interface Additives to Fabricate Hysteresis-Free Hybrid Perovskite-Based Photovoltaic Devices. ACS Applied Materials & Samp; Interfaces, 2016, 8, 23086-23094.	4.0	28
36	Halide perovskites enable polaritonic XY spin Hamiltonian at room temperature. Nature Materials, 2022, 21, 761-766.	13.3	28

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37	Random lasing in low molecular weight organic thin films. Applied Physics Letters, 2011, 99, 041114.	1.5	24
38	Directional Light Emission from Layered Metal Halide Perovskite Crystals. Journal of Physical Chemistry Letters, 2020, 11, 3458-3465.	2.1	23
39	Spectral Responsivity and Photoconductive Gain in Thin Film Black Phosphorus Photodetectors. ACS Photonics, 2019, 6, 3092-3099.	3.2	21
40	Generation of Rabi-frequency radiation using exciton-polaritons. Physical Review A, 2015, 92, .	1.0	18
41	Green polariton photoluminescence using the red-emitting phosphor PtOEP. Physical Review B, 2007, 76, .	1.1	17
42	Langmuir–Blodgett fabrication of large-area black phosphorus-C ₆₀ thin films and heterojunction photodetectors. Nanoscale, 2020, 12, 19814-19823.	2.8	17
43	Enhanced Light–Matter Interaction and Polariton Relaxation by the Control of Molecular Orientation. Advanced Optical Materials, 2021, 9, 2101048.	3.6	16
44	Resonant Rayleigh scattering from an anisotropic organic single-crystal microcavity. Physical Review B, 2008, 78, .	1.1	13
45	Polariton Condensation in Organic Semiconductors. Springer Series in Solid-state Sciences, 2017, , 151-163.	0.3	13
46	Large-Angle, Broadband, and Multifunctional Directive Waveguide Scatterer Gratings. ACS Photonics, 2019, 6, 3298-3305.	3.2	13
47	Lowâ€Threshold Excitonâ€Polariton Condensation via Fast Polariton Relaxation in Organic Microcavities. Advanced Optical Materials, 2022, 10, 2102034.	3.6	13
48	Role of Photon Recycling and Band Filling in Halide Perovskite Photoluminescence under Focussed Excitation Conditions. Journal of Physical Chemistry C, 2021, 125, 2240-2249.	1.5	11
49	Time-resolved imaging of carrier transport in halide perovskite thin films and evidence for nondiffusive transport. Physical Review Materials, 2019, 3, .	0.9	10
50	Degradation mechanism of protected ultrathin silver films and the effect of the seed layer. Applied Surface Science, 2019, 484, 335-340.	3.1	9
51	Measurement of the Mean Inner Potentials of Anthracene and Naphthalene. Physical Review Letters, 2009, 102, 065504.	2.9	8
52	Population of Subradiant States in Carbon Nanotube Microcavities in the Ultrastrong Light–Matter Coupling Regime. Journal of Physical Chemistry C, 2022, 126, 8417-8424.	1.5	8
53	Spectroscopic ellipsometry as an optical probe of strain evolution in ferroelectric thin films. Optics Express, 2012, 20, 4419.	1.7	7
54	Continuous ultrathin silver films deposited on SiO2 and SiNx using a self-assembled monolayer. Applied Physics Letters, 2016, 109, 121603.	1.5	5

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55	Cavity-Mediated Hybridization of Bright and Dark Excitons in an Ultrastrongly Coupled Carbon Nanotube Microcavity. ACS Photonics, 2021, 8, 2375-2383.	3.2	5
56	Exciton–Polaritons in Organic Semiconductor Optical Microcavities. Springer Series in Solid-state Sciences, 2012, , 349-375.	0.3	3
57	Nearly 40% outcoupling efficiency in OLEDs with all-metal electrodes. Applied Physics Letters, 2018, 113, 041105.	1.5	2
58	Photonic Gap Antennas Based on High-Index-Contrast Slot Waveguides. Physical Review Applied, 2021, 16, .	1. 5	2
59	Hybrid epsilon-near-zero modes of photonic gap antennas. Physical Review B, 2022, 105, .	1.1	1
60	Hybridization of Frenkel and Wannier-Mott excitons in an optical microcavity. , 2006, , .		0
61	Giant Davydov splitting of the lower polariton branch in a polycrystalline tetracene microcavity. , 2007, , .		0
62	Electrically-driven surface plasmon polariton generation using conjugated polymers., 2011,,.		0
63	Strong light-matter coupling in atomic monolayers. , 2014, , .		0
64	Interacting Polariton Fluids in a Monolayer of Tungsten Disulfide. , 2018, , .		0
65	Random Lasing in Low Molecular Weight Organic Thin Films. , 2011, , .		O
66	Pseudospin Selective Microcavity Polariton Emission From Two-dimensional Atomic Crystal. , 2015, , .		0
67	Manipulating Light and Matter using Strong Light-Matter Coupling. , 2019, , .		0