Arash Rahimi-Iman

List of Publications by Year
in descending order

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64	1,506	430874 18	315739 38
papers	citations	h-index	g-index

69	69	69	2378
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An electrically pumped polariton laser. Nature, 2013, 497, 348-352.	27.8	420
2	Characterization of an abnormal photoluminescence behavior upon crystal-phase transition of perovskite CH₃NH₃PbI₃. Physical Chemistry Chemical Physics, 2015, 17, 16405-16411.	2.8	215
3	Influence of the substrate material on the optical properties of tungsten diselenide monolayers. 2D Materials, 2017, 4, 025045.	4.4	80
4	Mode-locked semiconductor disk lasers. Advances in Optics and Photonics, 2016, 8, 370.	25.5	58
5	Recent advances in VECSELs. Journal of Optics (United Kingdom), 2016, 18, 093003.	2.2	56
6	Oxygen Intercalation Induced by Photocatalysis on the Surface of Hybrid Lead Halide Perovskites. Journal of Physical Chemistry C, 2016, 120, 7606-7611.	3.1	52
7	Self-mode-locking semiconductor disk laser. Optics Express, 2014, 22, 28390.	3.4	46
8	A 23-watt single-frequency vertical-external-cavity surface-emitting laser. Optics Express, 2014, 22, 12817.	3.4	45
9	Harmonic selfâ€modeâ€locking of optically pumped semiconductor disc laser. Electronics Letters, 2014, 50, 542-543.	1.0	39
10	Self-mode-locked quantum-dot vertical-external-cavity surface-emitting laser. Optics Letters, 2014, 39, 4623.	3.3	35
11	Color Change Effect in an Organicâ€“Inorganic Hybrid Material Based on a Porphyrin Diacid. Journal of Physical Chemistry C, 2016, 120, 28363-28373.	3.1	34
12	Spin-Layer and Spin-Valley Locking in CVD-Grown AAâ€²- and AB-Stacked Tungsten-Disulfide Bilayers. Journal of Physical Chemistry C, 2019, 123, 21813-21821.	3.1	27
13	Lead-Free Antimony Halide Perovskite with Heterovalent Mn²⁺ Doping. Inorganic Chemistry, 2020, 59, 15289-15294.	4.0	25
14	Dual-Wavelength Emission From a Serially Connected Two-Chip VECSEL. IEEE Photonics Technology Letters, 2016, 28, 927-929.	2.5	21
15	The influence of the environment on monolayer tungsten diselenide photoluminescence. Nano Structures Nano Objects, 2018, 15, 84-97.	3.5	21
16	Enhancement of the Monolayer Tungsten Disulfide Exciton Photoluminescence with a Two-Dimensional Material/Air/Gallium Phosphide In-Plane Microcavity. ACS Nano, 2019, 13, 5259-5267.	14.6	21
17	Interferometric Characterization of a Semiconductor Disk Laser driven Terahertz Source. Journal of Infrared, Millimeter, and Terahertz Waves, 2014, 35, 503-508.	2.2	20
18	High-Power Quantum-Dot Vertical-External-Cavity Surface-Emitting Laser Exceeding 8 W. IEEE Photonics Technology Letters, 2014, 26, 1561-1564.	2.5	19

#	Article	IF	Citations
19	A simple approach to fiber-based tunable microcavity with high coupling efficiency. Applied Physics Letters, 2019, 114, .	3.3	18
20	Gate Tuning of FÃ¶rster Resonance Energy Transfer in a Graphene - Quantum Dot FET Photo-Detector. Scientific Reports, 2016, 6, 28224.	3.3	16
21	Hybrid Structure of 2D Layered GaTe with Au Nanoparticles for Ultrasensitive Detection of Aromatic Molecules. ACS Applied Materials & Interfaces, 2018, 10, 1356-1362.	8.0	16
22	Microcavity-enhanced Kerr nonlinearity in a vertical-external-cavity surface-emitting laser. Optics Express, 2019, 27, 11914.	3.4	16
23	Self-mode-locked AlGaInP-VECSEL. Applied Physics Letters, 2017, 111, .	3.3	15
24	The Impact of the Substrate Material on the Optical Properties of 2D WSe2 Monolayers. Semiconductors, 2018, 52, 565-571.	0.5	14
25	Direct Measurement of the Radiative Pattern of Bright and Dark Excitons and Exciton Complexes in Encapsulated Tungsten Diselenide. Scientific Reports, 2020, 10, 8091.	3.3	14
26	Shedding light on excitonâ€™s nature in monolayer quantum material by optical dispersion measurements. Optics Express, 2019, 27, 37131.	3.4	14
27	Gain spectroscopy of a type-II VECSEL chip. Applied Physics Letters, 2016, 109, .	3.3	13
28	Continuously-tunable lightâ€“matter coupling in optical microcavities with 2D semiconductors. Scientific Reports, 2020, 10, 8303.	3.3	13
29	Polariton Physics. Springer Series in Optical Sciences, 2020, , .	0.7	13
30	Advances in Functional Nanomaterials Science. Annalen Der Physik, 2020, 532, 2000015.	2.4	12
31	TiN Nanoparticles for Enhanced THz Generation in TDS Systems. Journal of Infrared, Millimeter, and Terahertz Waves, 2017, 38, 1206-1214.	2.2	10
32	Optical dispersion of valley-hybridised coherent excitons with momentum-dependent valley polarisation in monolayer semiconductor. 2D Materials, 2021, 8, 015009.	4.4	9
33	Influence of growth temperature and disorder on spectral and temporal properties of Ga(NAsP) heterostructures. Journal of Applied Physics, 2016, 119, .	2.5	7
34	Fundamental transverse mode operation of a typeâ€ verticalâ€externalâ€cavity surfaceâ€emitting laser at 1.2 Âµm. Electronics Letters, 2017, 53, 93-94.	1.0	7
35	Widely Tunable Terahertzâ€Generating Semiconductor Disk Laser. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000204.	2.4	7
36	Two-chip power-scalable THz-generating semiconductor disk laser. Optics Letters, 2019, 44, 4000.	3.3	7

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37	Observation of Intralayer and Interlayer Excitons in Monolayered WSe2/WS2 Heterostructure. Semiconductors, 2019, 53, 2140-2146.	0.5	6
38	Self-mode-locked vertical-external-cavity surface-emitting laser. Proceedings of SPIE, 2016, , .	0.8	5
39	Signatures of a frequency-modulated comb in a VECSEL. Optica, 2021, 8, 458.	9.3	5
40	Radiative pattern of intralayer and interlayer excitons in two-dimensional WS2/WSe2 heterostructure. Scientific Reports, 2022, 12, 6939.	3.3	5
41	Analysis of optical scattering losses in vertical-external-cavity surface-emitting lasers. Applied Physics B: Lasers and Optics, 2015, 120, 41-46.	2.2	4
42	Tunable Polymer/Airâ€Bragg Optical Microcavity Configurations for Controllable Lightâ€“Matter Interaction Scenarios. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100182.	2.4	4
43	Investigation of the Beam Quality of a Terahertz Emitting Vertical-External-Cavity Surface-Emitting Laser. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 536-539.	2.2	3
44	Impact of detuning on the performance of semiconductor disk lasers. Applied Physics B: Lasers and Optics, 2017, 123, 1.	2.2	3
45	Study of laser-induced-plasma parameters for molybdenum targets. Plasma Research Express, 2019, 1, 035004.	0.9	3
46	Wavelength and Pump-Power Dependent Nonlinear Refraction and Absorption in a Semiconductor Disk Laser. IEEE Photonics Technology Letters, 2020, 32, 85-88.	2.5	3
47	Technological Realization of Polariton Systems. Springer Series in Optical Sciences, 2020, , 139-166.	0.7	3
48	Probing the ultrafast gain and refractive index dynamics of a VECSEL. Applied Physics Letters, 2021, 119, .	3.3	3
49	Machine Learningâ€Based Optimization of Chiral Photonic Nanostructures: Evolutionâ€•and Neural Networkâ€Based Designs. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	3
50	Microcavity-enhanced Kerr nonlinearity in a vertical-external-cavity surface-emitting laser: erratum. Optics Express, 2021, 29, 23290.	3.4	1
51	Evolution of multi-mode emission from vertical-external-cavity surface-emitting lasers. , 2014, , .		0
52	Self-mode-locked semiconductor disk lasers. , 2016, , .		0
53	A serially-connected two-chip VECSEL for dual-wavelength emission. , 2016, , .		0
54	Self-mode-locking and nonlinear lensing in VECSELs. , 2018, , .		0

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55	Direct Optical Evidence of Free Excitons in a Monolayer Quantum Material and Effective-Mass Measurements. , 2019, , .		0
56	Spin-Layer- and Spin-Valley-Locking Due to Symmetry in Differently-Stacked Tungsten Disulfide Bilayers. , 2019, , .		0
57	Nonlinear Lensing Phenomena in Semiconductor Disk Lasers. , 2019, , .		0
58	Room-Temperature CW Widely-Tunable THz-Generating Laser. , 2019, , .		0
59	Optical Measurement Techniques. Springer Series in Solid-state Sciences, 2021, , 133-185.	0.3	0
60	Lightâ€“Matter Interactions for Photonic Applications. Springer Series in Solid-state Sciences, 2021, , 61-97.	0.3	0
61	In the Field of Quantum Technologies. Springer Series in Solid-state Sciences, 2021, , 99-131.	0.3	0
62	Entering a Two-Dimensional Materials World. Springer Series in Solid-state Sciences, 2021, , 17-59.	0.3	0
63	Structuring Possibilities. Springer Series in Solid-state Sciences, 2021, , 209-228.	0.3	0
64	Density-dependent excitonic properties and dynamics in 2D heterostructures consisting of boron nitride and monolayer or few-layer tungsten diselenide. , 2018, , .		0