Michal Baranowski

List of Publications by Year
in descending order

62 papers	1,689 citations	331670 21 h-index	289244 40 g-index
63 all docs	63 docs citations	63 times ranked	2830 citing authors

#	Article	IF	Citations
1	Excitons in Metalâ€Halide Perovskites. Advanced Energy Materials, 2020, 10, 1903659.	19.5	240
2	Revealing the nature of photoluminescence emission in the metal-halide double perovskite Cs₂AgBiBr₆. Journal of Materials Chemistry C, 2019, 7, 8350-8356.	5.5	149
3	Probing the Interlayer Exciton Physics in a MoS₂/MoSe₂/MoS₂ van der Waals Heterostructure. Nano Letters, 2017, 17, 6360-6365.	9.1	118
4	MoirÃ© Intralayer Excitons in a MoSe₂/MoS₂ Heterostructure. Nano Letters, 2018, 18, 7651-7657.	9.1	113
5	Dark excitons and the elusive valley polarization in transition metal dichalcogenides. 2D Materials, 2017, 4, 025016.	4.4	71
6	Highly Oriented Atomically Thin Ambipolar MoSe₂ Grown by Molecular Beam Epitaxy. ACS Nano, 2017, 11, 6355-6361.	14.6	64
7	Broad Tunability of Carrier Effective Masses in Two-Dimensional Halide Perovskites. ACS Energy Letters, 2020, 5, 3609-3616.	17.4	54
8	Excitonic Properties of Low-Band-Gap Leadâ€"Tin Halide Perovskites. ACS Energy Letters, 2019, 4, 615-621.	17.4	51
9	Photoreflectance, photoluminescence, and microphotoluminescence study of optical transitions between delocalized and localized states in GaN<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.02</mml:mn></mml:mrow></mml:msub></mml:math>As<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.98</mml:mn></mml:mrow></mml:msub></mml:math>, Ga<mml:math	3.2	49
10	Tuning the Excitonic Properties of the 2D (PEA)₂(MA)_{<i>n</i>âˆ'1}Pb_{<i>n</i>}I_{3<i>n</i>+1} Perovskite Family via Quantum Confinement. Journal of Physical Chemistry Letters, 2021, 12, 1638-1643.	4.6	49
11	Revealing Excitonic Phonon Coupling in (PEA)₂(MA)_{<i>n</i>âˆ'1}Pb_{<i>n</i>}I_{3<i>n</i>+1} 2D Layered Perovskites. Journal of Physical Chemistry Letters, 2020, 11, 5830-5835.	4.6	47
12	Exciton binding energy and effective mass of CsPbCl₃: a magneto-optical study. Photonics Research, 2020, 8, A50.	7.0	43
13	Giant Fine Structure Splitting of the Bright Exciton in a Bulk MAPbBr₃ Single Crystal. Nano Letters, 2019, 19, 7054-7061.	9.1	41
14	Phase-Transition-Induced Carrier Mass Enhancement in 2D Ruddlesdenâ€"Popper Perovskites. ACS Energy Letters, 2019, 4, 2386-2392.	17.4	38
15	Brightening of dark excitons in 2D perovskites. Science Advances, 2021, 7, eabk0904.	10.3	34
16	Beyond Quantum Efficiency Limitations Originating from the Piezoelectric Polarization in Light-Emitting Devices. ACS Photonics, 2019, 6, 1963-1971.	6.6	33
17	Optical properties of GaAsBi/GaAs quantum wells: Photoreflectance, photoluminescence and time-resolved photoluminescence study. Semiconductor Science and Technology, 2015, 30, 094005.	2.0	30
18	Intervalley Scattering of Interlayer Excitons in a MoS₂/MoSe₂/MoS₂ Heterostructure in High Magnetic Field. Nano Letters, 2018, 18, 3994-4000.	9.1	27

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19	Symmetry Breakdown in Franckeite: Spontaneous Strain, Rippling, and Interlayer MoirÃ©. Nano Letters, 2020, 20, 1141-1147.	9.1	25
20	Carrier dynamics between delocalized and localized states in type-II GaAsSb/GaAs quantum wells. Applied Physics Letters, 2011, 98, .	3.3	24
21	Non equilibrium anisotropic excitons in atomically thin ReS ₂. 2D Materials, 2019, 6, 015012.	4.4	23
22	Impact of wetting-layer density of states on the carrier relaxation process in low indium content self-assembled (In,Ga)As/GaAs quantum dots. Physical Review B, 2013, 87, .	3.2	21
23	Static and Dynamic Disorder in Triple-Cation Hybrid Perovskites. Journal of Physical Chemistry C, 2018, 122, 17473-17480.	3.1	21
24	Quantification of Exciton Fine Structure Splitting in a Two-Dimensional Perovskite Compound. Journal of Physical Chemistry Letters, 2022, 13, 4463-4469.	4.6	20
25	Model of hopping excitons in GaInNAs: simulations of sharp lines in micro-photoluminescence spectra and their dependence on the excitation power and temperature. Journal of Physics Condensed Matter, 2011, 23, 205804.	1.8	19
26	Multicolor emission from intermediate band semiconductor ZnO1â^'xSex. Scientific Reports, 2017, 7, 44214.	3.3	19
27	Temperature evolution of carrier dynamics in GaNxPyAs1â^'yâ^'xalloys. Journal of Applied Physics, 2015, 117, .	2.5	18
28	The impact of hexagonal boron nitride encapsulation on the structural and vibrational properties of few layer black phosphorus. Nanotechnology, 2019, 30, 195201.	2.6	18
29	Perspective on the physics of two-dimensional perovskites in high magnetic field. Applied Physics Letters, 2021, 118, .	3.3	18
30	Dynamics of localized excitons in Ga0.69In0.31N0.015As0.985/GaAs quantum well: Experimental studies and Monte-Carlo simulations. Applied Physics Letters, 2012, 100, 202105.	3.3	17
31	Negative Thermal Quenching of Efficient Whiteâ€Light Emission in a 1D Ladderâ€Like Organic/Inorganic Hybrid Material. Advanced Optical Materials, 2019, 7, 1900763.	7.3	17
32	Time-resolved photoluminescence studies of annealed 1.3-Î¼m GaInNAsSb quantum wells. Nanoscale Research Letters, 2014, 9, 81.	5.7	15
33	Excitation efficiency determines the upconversion luminescence intensity of Î²-NaYF₄:Er³⁺,Yb³⁺ nanoparticles in magnetic fields up to 70 T. Nanoscale, 2020, 12, 20300-20307.	5.6	15
34	Impact of photodoping on inter- and intralayer exciton emission in a MoS2/MoSe2/MoS2 heterostructure. Applied Physics Letters, 2018, 113, 062107.	3.3	12
35	Nitrogen-related changes in exciton localization and dynamics in GaInNAs/GaAs quantum wells grown by metalorganic vapor phase epitaxy. Applied Physics A: Materials Science and Processing, 2015, 118, 479-486.	2.3	11
36	Interlayer excitons in MoSe₂/2D perovskite hybrid heterostructures â€" the interplay between charge and energy transfer. Nanoscale, 2022, 14, 8085-8095.	5.6	11

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37	Nonradiative Energy Transfer and Selective Charge Transfer in a WS₂/(PEA)₂PbI₄ Heterostructure. ACS Applied Materials & Interfaces, 2021, 13, 33677-33684.	8.0	10
38	Carrier dynamics in type-II GaAsSb/GaAs quantum wells. Journal of Physics Condensed Matter, 2012, 24, 185801.	1.8	9
39	Steady state and femtosecond spectroscopy of Perylimide Red dye in porous and solâ€“gel glasses. Chemical Physics Letters, 2012, 546, 171-175.	2.6	9
40	Observation of A1g Raman mode splitting in few layer black phosphorus encapsulated with hexagonal boron nitride. Nanoscale, 2017, 9, 19298-19303.	5.6	9
41	The influence of nitrogen and antimony on the optical quality of InNAs(Sb) alloys. Journal Physics D: Applied Physics, 2016, 49, 115105.	2.8	7
42	Hopping Excitons in GaInNAs - Simulation Î¿f Micro- and Macrophotoluminescence Spectra. Acta Physica Polonica A, 2011, 120, 899-901.	0.5	6
43	Molecular dynamics of poly(ethylene 2,6-naphthalate)-polycarbonate composite by nuclear magnetic resonance. Applied Magnetic Resonance, 2005, 29, 221-229.	1.2	5
44	Time resolved photoluminescence of In(N)As quantum dots embedded in GaIn(N)As/GaAs quantum well. Applied Physics Letters, 2010, 96, .	3.3	5
45	Time-resolved photoluminescence studies of the optical quality of InGaN/GaN multi-quantum well grown by MOCVDâ€”antimony surfactant effect. Semiconductor Science and Technology, 2012, 27, 105027.	2.0	5
46	Effects of band anticrossing on the temperature dependence of the band gap of ZnSe_{1âˆ’x}O_xalloys. Semiconductor Science and Technology, 2017, 32, 015005.	2.0	5
47	Contactless electroreflectance, photoluminescence and time-resolved photoluminescence of GaInNAs quantum wells obtained by the MBE method with N-irradiation. Semiconductor Science and Technology, 2011, 26, 045012.	2.0	4
48	Design and Optical Characterization of Novel InGaN/GaN Multiple Quantum Well Structures by Metal Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JL10.	1.5	4
49	Enhancement of photoluminescence from GaInNAsSb quantum wells upon annealing: improvement of material quality and carrier collection by the quantum well. Journal of Physics Condensed Matter, 2013, 25, 065801.	1.8	4
50	Unified Model of Nanosecond Charge Recombination in Closed Reaction Centers from <i>Rhodobacter sphaeroides</i>: Role of Protein Polarization Dynamics. Journal of Physical Chemistry B, 2016, 120, 4890-4896.	2.6	4
51	Study of delocalized and localized states in ZnSeO layers with photoluminescence, micro-photoluminescence, and time-resolved photoluminescence. Journal of Applied Physics, 2019, 125, .	2.5	4
52	Two Dimensional Perovskites/Transition Metal Dichalcogenides Heterostructures: Puzzles and Challenges. Israel Journal of Chemistry, 2022, 62, .	2.3	4
53	Strain induced lifting of the charged exciton degeneracy in monolayer MoS₂ on a GaAs nanomembrane. 2D Materials, 2022, 9, 045006.	4.4	4
54	Theoretical Studies of the Influence of Temperature on Photoluminescence Dynamics in GaInNAs/GaAs Quantum Wells. Japanese Journal of Applied Physics, 2013, 52, 08JL04.	1.5	3

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55	Photoluminescence characterization of InGaN/InGaN quantum wells grown by plasmaâ€assisted molecular beam epitaxy: Impact of nitrogen and galium fluxes. Physica Status Solidi (B): Basic Research, 2015, 252, 983-988.	1.5	3
56	Direct evidence of photoluminescence broadening enhancement by local electric field fluctuations in polar InGaN/GaN quantum wells. Japanese Journal of Applied Physics, 2018, 57, 020305.	1.5	3
57	Influence of temperature on spin polarization dynamics in dilute nitride semiconductorsâ€”Role of nonparamagnetic centers. Journal of Applied Physics, 2015, 118, .	2.5	3
58	Monte Carlo Simulations of the Influence of Localization Centres on Carrier Dynamics in GaInNAs Quantum Wells. Acta Physica Polonica A, 2012, 122, 1022-1025.	0.5	3
59	Influence of oversized cations on electronic dimensionality of d-MAPbI₃ crystals. Journal of Materials Chemistry C, 2020, 8, 7928-7934.	5.5	1
60	Time Resolved Photoluminescence Study of the Wide (Cd,Mn)Te/(Cd,Mg)Te Quantum Well. Acta Physica Polonica A, 2013, 124, 895-897.	0.5	0
61	Magneto-spectroscopy studies provide direct evidence for the coupling of excitons to organic ligand vibrations in 2D RP perovskites. , 0, , .		0
62	Mechanism of Electronic Coupling in Hybrid Transition Metal Dichalcogenide-2D Perovskite Heterostructures. , 0, , .		0