

# Adam Babinski

## List of Publications by Year in descending order

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121  
papers

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361413

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all docs

121  
docs citations

121  
times ranked

1806  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiphonon resonant Raman scattering in MoS <sub>2</sub> . Applied Physics Letters, 2014, 104, 092106.	3.3	118
2	Excitonic Energy Shell Structure of Self-Assembled InGaAs/GaAs Quantum Dots. Physical Review Letters, 2004, 92, 187402.	7.8	111
3	Resonant Raman scattering in MoS <sub>2</sub> "From bulk to monolayer. Solid State Communications, 2014, 197, 53-56.	1.9	108
4	Rapid thermal annealing of InAs/GaAs quantum dots under a GaAs proximity cap. Applied Physics Letters, 2001, 79, 2576-2578.	3.3	105
5	Raman scattering of few-layers MoTe <sub>2</sub> . 2D Materials, 2016, 3, 025010.	4.4	67
6	Raman scattering excitation spectroscopy of monolayer WS <sub>2</sub> . Scientific Reports, 2017, 7, 5036.	3.3	63
7	Energy Spectrum of Two-Dimensional Excitons in a Nonuniform Dielectric Medium. Physical Review Letters, 2019, 123, 136801.	7.8	56
8	Fine structure in the excitonic emission of InAs <sup>+</sup> GaAs quantum dot molecules. Physical Review B, 2005, 71, .	3.2	47
9	Raman spectroscopy of GaSe and InSe post-transition metal chalcogenides layers. Faraday Discussions, 2021, 227, 163-170.	3.2	43
10	Optical Properties of Molybdenum Disulfide (MoS <sub>2</sub> ). Acta Physica Polonica A, 2013, 124, 849-851.	0.5	42
11	Emission from a highly excited single InAs <sup>+</sup> GaAs quantum dot in magnetic fields: An excitonic Fock-Darwin diagram. Physical Review B, 2006, 74, .	3.2	40
12	Zero factors and nonzero orbital momenta in self-assembled quantum dots. Physical Review B, 2007, 75, .	3.2	39
13	Excitonic Complexes in n-Doped WS <sub>2</sub> Monolayer. Nano Letters, 2021, 21, 2519-2525.	9.1	35
14	Pressure-induced negative charge state of the EL2 defect in its metastable configuration. Physical Review B, 1991, 43, 2070-2080.	3.2	31
15	Excitonic complexes in natural InAs/GaAs quantum dots. Physical Review B, 2015, 91, .	3.2	30
16	Ground-state emission from a single InAs <sup>+</sup> GaAs self-assembled quantum dot structure in ultrahigh magnetic fields. Physical Review B, 2006, 74, .	3.2	29
17	Natural quantum dots in the InAs <sup>+</sup> GaAs wetting layer. Applied Physics Letters, 2008, 92, 171104.	3.3	27
18	The disorder-induced Raman scattering in Au/MoS <sub>2</sub> heterostructures. AIP Advances, 2015, 5, .	1.3	27

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19	Post-growth thermal treatment of self-assembled InAs/GaAs quantum dots. <i>Thin Solid Films</i> , 2002, 412, 84-88.	1.8	22
20	Neutral and charged dark excitons in monolayer WS <sub>2</sub> . <i>Nanoscale</i> , 2020, 12, 18153-18159.	5.6	22
21	Quantification of Exciton Fine Structure Splitting in a Two-Dimensional Perovskite Compound. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 4463-4469.	4.6	20
22	Transport and quantum electron mobility in the modulation Si $\delta$ -doped pseudomorphic GaAs/In <sub>0.2</sub> Ga <sub>0.8</sub> As/Al <sub>0.2</sub> Ga <sub>0.8</sub> As quantum well grown by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , 2000, 77, 999.	3.3	18
23	Tuning carrier concentration in a superacid treated MoS <sub>2</sub> monolayer. <i>Scientific Reports</i> , 2019, 9, 1989.	3.3	18
24	Fock-Darwin spectrum of a single InAs/GaAs quantum dot. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 3748-3751.	0.8	17
25	Valley polarization of exciton-polaritons in monolayer WSe <sub>2</sub> in a tunable microcavity. <i>Nanoscale</i> , 2019, 11, 9574-9579.	5.6	17
26	The optical signature of few-layer ReSe <sub>2</sub> . <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	17
27	Electron transfer efficiency of Si $\delta$ -modulation-doped pseudomorphic GaAs/In <sub>0.2</sub> Ga <sub>0.8</sub> As/Al <sub>x</sub> Ga <sub>1-x</sub> As quantum wells. <i>Applied Physics Letters</i> , 1998, 72, 2322-2324.	3.3	16
28	Resonant quenching of Raman scattering due to out-of-plane A <sub>1g</sub> /A <sub>2g</sub> modes in few-layer MoTe <sub>2</sub> . <i>Nanophotonics</i> , 2017, 6, 1281-1288.	6.0	16
29	Valley polarization of singlet and triplet trions in a WS <sub>2</sub> monolayer in magnetic fields. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 19155-19161.	2.8	16
30	The persistent photoconductivity effect in modulation Si $\delta$ -doped pseudomorphic In <sub>0.2</sub> Ga <sub>0.8</sub> As/GaAs quantum well structure. <i>Applied Physics Letters</i> , 1997, 71, 1664-1666.	3.3	15
31	Single-dot spectroscopy in high magnetic fields. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2005, 26, 190-193.	2.7	15
32	Exposing the trion's fine structure by controlling the carrier concentration in hBN-encapsulated MoS <sub>2</sub> . <i>Nanoscale</i> , 2021, 13, 18726-18733.	5.6	14
33	Raman scattering from the bulk inactive out-of-plane $B_{2g}$ mode in few-layer MoTe <sub>2</sub> . <i>Scientific Reports</i> , 2018, 8, 17745.	3.3	12
34	Electroreflectance bias-wavelength mapping of the modulation Si $\delta$ -doped pseudomorphic GaAs/InGaAs/AlGaAs structure. <i>Applied Physics Letters</i> , 1999, 75, 2088-2090.	3.3	11
35	Energy shell structure of a single InAs/GaAs quantum dot with a spin-orbit interaction. <i>Physical Review B</i> , 2009, 79, .	3.2	11
36	Single-exciton energy shell structure in InAs/GaAs quantum dots. <i>Physical Review B</i> , 2008, 78, .	3.2	10

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37	The effect of metallic substrates on the optical properties of monolayer MoSe <sub>2</sub> . Scientific Reports, 2020, 10, 4981.	3.3	10
38	The optical response of artificially twisted MoS <sub>2</sub> bilayers. Scientific Reports, 2021, 11, 17037.	3.3	10
39	Electronic structure of InAs/GaAs self-assembled quantum dots studied by high-excitation luminescence in magnetic fields up to. Physica B: Condensed Matter, 2004, 346-347, 432-436.	2.7	9
40	Emission from Mesoscopic-Size Islands Formed in a GaAs/AlAs Double Layer Structure. Acta Physica Polonica A, 2004, 106, 367-381.	0.5	9
41	Pressure-Driven Phase Transitions in Bulk HfS <sub>2</sub> . Acta Physica Polonica A, 2022, 141, 95-98.	0.5	9
42	Layered SnSe nanoflakes with anharmonic phonon properties and memristive characteristics. Applied Surface Science, 2022, 599, 153983.	6.1	9
43	Subband electron densities of Si $\delta$ -doped pseudomorphic In <sub>0.2</sub> Ga <sub>0.8</sub> As/GaAs heterostructures. Applied Physics Letters, 1997, 70, 3582-3584.	3.3	8
44	Electrically modulated photoluminescence in self-organized InGaAs/GaAs quantum dots. Applied Physics Letters, 1998, 73, 2811-2813.	3.3	8
45	Breathing modes in few-layer MoTe <sub>2</sub> activated by h-BN encapsulation. Applied Physics Letters, 2020, 116, .	3.3	8
46	Electroluminescence from a forward-biased Schottky barrier diode on modulation Si $\delta$ -doped GaAs/InGaAs/AlGaAs heterostructure. Applied Physics Letters, 2001, 78, 3992-3994.	3.3	7
47	Single-photon emission from the natural quantum dots in the InAs/GaAs wetting layer. Physical Review B, 2011, 84, .	3.2	7
48	GaSb Dots Grown on GaAs Surface by Metalorganic Chemical Vapour Deposition. Acta Physica Polonica A, 1995, 88, 974-976.	0.5	7
49	Anisotropic Optical and Vibrational Properties of GeS. Nanomaterials, 2021, 11, 3109.	4.1	7
50	Effects of magnetic fields on free excitons in CuInSe <sub>2</sub> . Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1086-1088.	0.8	6
51	The effect of In-flush on the optical anisotropy of InAs/GaAs quantum dots. Journal of Applied Physics, 2012, 111, 033510.	2.5	6
52	Optical spectroscopy on semiconductor quantum dots in high magnetic fields. Comptes Rendus Physique, 2013, 14, 121-130.	0.9	6
53	Resonance and antiresonance in Raman scattering in GaSe and InSe crystals. Scientific Reports, 2021, 11, 924.	3.3	6
54	Fine Structure of Neutral Excitons in Single GaAlAs Quantum Dots. Acta Physica Polonica A, 2012, 122, 988-990.	0.5	6

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55	Optical determination of the dopant concentration in the $\delta$ -doping layer. Journal of Applied Physics, 2002, 92, 163-167.	2.5	5
56	Electronic and Structural Properties of Interdiffused Self-Assembled Quantum Dots from Magneto-Photoluminescence. Japanese Journal of Applied Physics, 2004, 43, 2088-2092.	1.5	5
57	Charged and neutral excitons in natural quantum dots in the InAs/GaAs wetting layer. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2078-2080.	2.7	5
58	The effect of dielectric environment on the brightening of neutral and charged dark excitons in WSe <sub>2</sub> monolayer. Applied Physics Letters, 2022, 120, .	3.3	5
59	Splitting of the metastable EL2 acceptor state. Physical Review B, 1994, 50, 10656-10660.	3.2	4
60	Free-to-bound and interband recombination in the photoluminescence of a dense two-dimensional electron gas. Physical Review B, 2002, 65, .	3.2	4
61	Intershell Exchange Interaction in Charged GaAlAs Quantum Dots. Acta Physica Polonica A, 2013, 124, 785-787.	0.5	4
62	Quadexciton cascade and fine-structure splitting of the triexciton in a single quantum dot. Europhysics Letters, 2016, 113, 17004.	2.0	4
63	The Fine Structure of a Triexciton in Single InAs/GaAs Quantum Dots. Acta Physica Polonica A, 2012, 122, 991-993.	0.5	4
64	First TSC and DLTS Measurements of Low Temperature GaAs. Acta Physica Polonica A, 1991, 80, 413-416.	0.5	4
65	Emission Excitation Spectroscopy in WS <sub>2</sub> Monolayer Encapsulated in Hexagonal BN. Acta Physica Polonica A, 2019, 136, 624-627.	0.5	4
66	Quantum corrections to the electrical conduction in an AlGaIn/GaN heterostructure. Applied Physics A: Materials Science and Processing, 2001, 72, 691-698.	2.3	3
67	Determination of Si $\delta$ -Doping Concentration in GaN by Electroreflectance. Physica Status Solidi (B): Basic Research, 2002, 234, 868-871.	1.5	3
68	Quantum oscillations of the luminescence from a modulation-doped GaAs $\delta$ -InGaAs $\delta$ -GaAlAs quantum well. Applied Physics Letters, 2006, 88, 051909.	3.3	3
69	Optical spectroscopy of a single InAs/GaAs quantum dot in high magnetic fields. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 288-291.	2.7	3
70	Three-dimensional localization of excitons in the InAs/GaAs wetting layer – magnetospectroscopic study. Physica Status Solidi (B): Basic Research, 2009, 246, 850-853.	1.5	3
71	The excited spin-triplet state of a charged exciton in quantum dots. Journal of Physics Condensed Matter, 2016, 28, 365301.	1.8	3
72	Dynamics of Photoexcited Carriers in GaInAs/GaAs Quantum Dots. Acta Physica Polonica A, 2001, 100, 379-386.	0.5	3

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73	Localization of Excitons in the Wetting Layer Accompanying Self-Assembled InAs/GaAs Quantum Dots. Acta Physica Polonica A, 2004, 105, 547-552.	0.5	3
74	Optical Spectroscopy of Quantum Dots in High Magnetic Fields. Acta Physica Polonica A, 2006, 110, 275-286.	0.5	3
75	Neutral and Charged Excitons Localized in the InAs/GaAs Wetting Layer. Acta Physica Polonica A, 2008, 114, 1055-1060.	0.5	3
76	Raman Spectroscopy of Shear Modes in a Few-Layer MoS <sub>2</sub> . Acta Physica Polonica A, 2016, 129, A-132-A-134.	0.5	3
77	The Effect of Substrate on Vibrational Properties of Single-Layer MoS <sub>2</sub> . Acta Physica Polonica A, 2016, 130, 1172-1175.	0.5	3
78	Si and C $\delta$ -doping for device applications. Journal of Crystal Growth, 1998, 195, 54-57.	1.5	2
79	MAGNETO-LUMINESCENCE OF A SINGLE LATERAL ISLAND FORMED IN A TYPE - II GaAs/AlAs QW. International Journal of Modern Physics B, 2004, 18, 3807-3812.	2.0	2
80	Photoluminescence excitation spectroscopy of InAs/GaAs quantum dots in high magnetic field. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 22, 603-606.	2.7	2
81	Properties of Excitons in Quantum Dots with a Weak Confinement. Acta Physica Polonica A, 2013, 124, 781-784.	0.5	2
82	Energy spectrum of confined positively charged excitons in single quantum dots. Physical Review B, 2016, 94, .	3.2	2
83	Dynamics of Excitation Transfer Inside InAs/GaAs Quantum Dot System. Acta Physica Polonica A, 2006, 110, 219-224.	0.5	2
84	The Pressure Dependence of Transition Metal-Related Levels in GaAs. Acta Physica Polonica A, 1991, 79, 323-327.	0.5	2
85	Symmetry of the Acceptor-Like State of the EL2 Defect in the Metastable Configuration. Materials Science Forum, 1993, 143-147, 1051-1056.	0.3	1
86	Ordering of the EL2 Defects in the Metastable State. Materials Science Forum, 1993, 143-147, 1007-1012.	0.3	1
87	InGaAs/GaAs Quantum Dot Interdiffusion Induced by Cap Layer Overgrowth. Materials Research Society Symposia Proceedings, 2000, 618, 179.	0.1	1
88	The Effect of Electron Occupation on the Photoluminescence from the Self-Organised InGaAs/GaAs Quantum Dots. Physica Status Solidi A, 2000, 178, 313-316.	1.7	1
89	Step-like Photoluminescence Dynamics in Field-Effect Structures Containing Quantum Dots. Physica Status Solidi (B): Basic Research, 2001, 227, 605-612.	1.5	1
90	Electron and Hole States in Vertically Coupled Self-Assembled InGaAs Quantum Dots. AIP Conference Proceedings, 2005, , .	0.4	1

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91	Optical readout of charge and spin in a self-assembled quantum dot in a strong magnetic field. Europhysics Letters, 2007, 79, 47005.	2.0	1
92	Confocal Microscope Studies of MoS <sub>2</sub> Layer Thickness. Acta Physica Polonica A, 2014, 126, 1207-1208.	0.5	1
93	Magnetic Field Effect on the Excitation Spectrum of a Neutral Exciton in a Single Quantum Dot. Acta Physica Polonica A, 2014, 126, 1066-1068.	0.5	1
94	Anomalous Raman Scattering In Few Monolayer MoTe <sub>2</sub> . MRS Advances, 2017, 2, 1539-1544.	0.9	1
95	Disorder-induced natural quantum dots in InAs/GaAs nanostructures. Opto-electronics Review, 2018, 26, 73-79.	2.4	1
96	Influence of Intersubband Scattering on the Magnetic Field Dependence of the Conductivity Tensor. Acta Physica Polonica A, 2006, 110, 337-344.	0.5	1
97	Properties of the Fe Acceptor Level in Inp Under Hydrostatic Pressure. , 0, , .		0
98	Capacitance measurements on self-organised MOCVD-grown InGaAs quantum dots. , 0, , .		0
99	Ultrafast time-resolved photoluminescence measurements on InGaAs/GaAs quantum dots. , 0, , .		0
100	Low-temperature light emission in a forward-biased Schottky diode with a n-doped channel. , 0, , .		0
101	The effect of electric field on the self-organized quantum dots. , 0, , .		0
102	Post-growth thermal treatment of the InAs/GaAs quantum dots. , 0, , .		0
103	Enhanced exciton-LO phonon coupling in doped quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 400-404.	2.7	0
104	Electron-hole complexes in self-assembled quantum dots in strong magnetic fields. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 211-214.	2.7	0
105	Excitonic Fock-Darwin Spectrum Of A Single Quantum Dot. AIP Conference Proceedings, 2007, , .	0.4	0
106	Quantum confinement in MOVPE-grown structures with self-assembled InAs/GaAs quantum dots. Journal of Physics: Conference Series, 2010, 245, 012079.	0.4	0
107	Renormalization of effective mass in self-assembled quantum dots due to electron-electron interactions. Journal of Physics: Conference Series, 2013, 456, 012002.	0.4	0
108	Resonant Raman Scattering in MoS <sub>2</sub> . Materials Research Society Symposia Proceedings, 2015, 1726, 7.	0.1	0

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109	Photoluminescence from InGaAs/GaAs Quantum Dots in a High Electric Field. , 2000, , 395-404.		0
110	MAGNETO-LUMINESCENCE OF A SINGLE LATERAL ISLAND FORMED IN A TYPE - II GaAs/AlAs QW. , 2005, , .		0
111	Quantum Confinement in InAs/GaAs Systems with Self-Assembled Quantum Dots Grown Using In-Flush Technique. Acta Physica Polonica A, 2011, 119, 624-626.	0.5	0
112	Acceptor-Like Level of the EL2 Defect in its Metastable Configuration. Acta Physica Polonica A, 1991, 79, 129-132.	0.5	0
113	Passivation of a Bulk Defect $E_{c} - 0.22$ eV in GaAs by Contact with Phosphoric Acid. Acta Physica Polonica A, 1991, 79, 277-280.	0.5	0
114	Electrical Properties of an Acceptor-like State of Metastable EL2 in n-type GaAs under Uniaxial Stress. Acta Physica Polonica A, 1992, 82, 908-910.	0.5	0
115	Hydrostatic Pressure Spectroscopy of the Vanadium Luminescence in GaAs. Acta Physica Polonica A, 1992, 82, 837-840.	0.5	0
116	Hydrostatic-Pressure Deep Level Transient Spectroscopy Study of the Heteroantisite Antimony Level in GaAs. Acta Physica Polonica A, 1992, 82, 841-844.	0.5	0
117	Deep Level Transient Spectroscopy Measurements of an Acceptor-like State of Metastable EL2 in GaAs and GaAsP. Acta Physica Polonica A, 1993, 84, 673-676.	0.5	0
118	Orientation of Metastable EL2 under Uniaxial Stress. Acta Physica Polonica A, 1995, 87, 137-140.	0.5	0
119	Optical Properties of Self-Organized InGaAs/GaAs Quantum Dots in Field-Effect Structures. Materials Research Society Symposia Proceedings, 1998, 536, 269.	0.1	0
120	Raman spectroscopy of few-layer MoSe <sub>2</sub> in wide range of temperature. , 2016, , .		0
121	Relative Reflection Difference as a Method for Measuring the Thickness of the Exfoliated MoSe <sub>2</sub> Layers. Acta Physica Polonica A, 2017, 132, 316-318.	0.5	0