

Kukushkin Igor

List of Publications by Year in descending order

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129
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129
docs citations

129
times ranked

736
citing authors

#	ARTICLE	IF	CITATIONS
1	Terahertz plasma edge engineering in semiconductor membranes with a two-dimensional electron layer. Applied Physics Letters, 2022, 120, 031104.	1.5	4
2	Anomalous retardation of relativistic plasmons: Microwave response of a gated two-dimensional electron system. Physical Review B, 2022, 105, .	1.1	2
3	Comparative Analysis of Giant Optical Fluctuations in GaAs Quantum Wells of Different Widths. Bulletin of the Russian Academy of Sciences: Physics, 2022, 86, 438-442.	0.1	0
4	Renormalization of the Exchange Energy Scale in Quantum Hall Ferromagnets with a Filling Factor of 1. Bulletin of the Russian Academy of Sciences: Physics, 2022, 86, 375-379.	0.1	0
5	Absorption of Microwave Radiation by Bernstein Magnetoplasmon Modes in Inhomogeneous Two-Dimensional Electronic Systems. Bulletin of the Russian Academy of Sciences: Physics, 2022, 86, 394-399.	0.1	2
6	Multiparticle Effects in the Spectrum of Collective Excitations of Strongly Interacting Two-Dimensional Electron Systems (Brief Review). JETP Letters, 2021, 113, 102-114.	0.4	5
7	Relaxation of Plasma Excitations in Two-Dimensional Electron Systems. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 118-122.	0.1	1
8	Observing Spin Resonance in Two-Dimensional Conductivity Electrons in Contactless Geometry. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 123-126.	0.1	0
9	A New Family of Plasma Excitations in a Partially Gated Two-Dimensional Electron System. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 113-117.	0.1	2
10	Coulomb Correlations as the Root Cause of the Ferromagnetic Transition in a Quantum Hall State with Filling Factor $\nu = 2$. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 154-158.	0.1	0
11	Thermodynamics of Quantum Hall Ferromagnets. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 165-168.	0.1	0
12	Observation of acoustic plasma waves with a velocity approaching the speed of light. Physical Review B, 2021, 103, .	1.1	11
13	Discovery of Two-Dimensional Electromagnetic Plasma Waves. Physical Review Letters, 2021, 126, 136801.	2.9	12
14	Crossover from proximity to ordinary two-dimensional plasma excitation. Physical Review B, 2021, 103, .	1.1	4
15	Electron Spin Resonance under Conditions of a Ferromagnetic Phase Transition. JETP Letters, 2021, 113, 657-661.	0.4	2
16	Plasmon Excitations in Partially Screened Two-Dimensional Electron Systems (Brief Review). JETP Letters, 2021, 113, 713-722.	0.4	4
17	Effect of a conductive layer on Fabry-Pérot resonances. Physical Review B, 2021, 104, .	1.1	3
18	Relativistic plasma excitations in two-dimensional electron systems. , 2021, , .		0

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19	Anomalous spin exciton with a magnetoroton minimum in a quantum Hall ferromagnet at a filling factor $\nu = 1/2$. Physical Review B, 2021, 104, .	1.1	2
20	Contactless Observation of Microwave Induced Resistance Oscillations in ZnO/Mg _x Zn _{1-x} O Heterojunction. JETP Letters, 2021, 114, 279-283.	0.4	0
21	Magnetodispersion of two-dimensional plasmon polaritons. Physical Review B, 2021, 104, .	1.1	2
22	Resonant Light Reflection in the 1/3 Laughlin State. JETP Letters, 2021, 114, 412-416.	0.4	2
23	Bernstein Modes in Two-Dimensional Electron Systems. Journal of Surface Investigation, 2021, 15, 1133-1137.	0.1	1
24	Renormalization of the Cyclotron Frequency in a Screened Two-Dimensional Electron System with Strong Retardation. JETP Letters, 2021, 114, 616-619.	0.4	3
25	A tunable plasmonic resonator using kinetic 2D inductance and patch capacitance. Applied Physics Letters, 2020, 117, .	1.5	8
26	Physical origin of relativistic plasmons in a two-dimensional electron system. Physical Review B, 2020, 102, .	1.1	14
27	Superluminal electromagnetic two-dimensional plasma waves. Physical Review B, 2020, 102, .	1.1	9
28	Renormalization of the spectrum of in-depth excitations below the Fermi level in a two-dimensional electron system with strong interaction. Physical Review B, 2020, 101, .	1.1	3
29	Comparative Study of the Two-Dimensional Plasma Excitations in the Heterostructures ZnO/MgZnO, AlAs/AlGaAs, and GaAs/AlGaAs. Journal of Experimental and Theoretical Physics, 2020, 130, 594-601.	0.2	4
30	Investigation of spin stiffness in spin-depolarized states of two-dimensional electron systems with time-resolved Kerr rotation. Scientific Reports, 2020, 10, 2270.	1.6	8
31	Spin stiffness of a Fermi liquid in the $\nu = 1/2$ quantum Hall regime. Physical Review B, 2020, 102, .	1.1	1
32	Spectra of Two-Dimensional Proximity Plasmons Measured by the Standing-Wave Method. JETP Letters, 2020, 111, 282-285.	0.4	11
33	Anomalous Anti-Stokes Scattering Signal as an Indicator of Macrofilled Magnetoexciton Levels in the Quantum Hall Effect Regime. JETP Letters, 2020, 112, 53-57.	0.4	5
34	Metastructures for the Giant Enhancement of Raman Scattering in the Near Infrared Spectral Range. JETP Letters, 2020, 112, 31-36.	0.4	7
35	Resonant Photoluminescence of a Two-Dimensional Electron System upon the Formation of a Bulk 1/3 State of the Fractional Hall Effect. JETP Letters, 2020, 112, 485-490.	0.4	4
36	Proximity plasma excitations in disk and ring geometries. Physical Review B, 2019, 100, .	1.1	14

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37	Retardation Effects for "Dark" Plasma Modes in a Two-Dimensional Electron System. JETP Letters, 2019, 109, 663-666.	0.4	5
38	Two-dimensional plasmon induced by metal proximity. Physical Review B, 2019, 99, .	1.1	24
39	Spin transport in the bulk of two-dimensional Hall insulator. Applied Physics Letters, 2019, 114, .	1.5	12
40	Observation of Electron Spin Resonance in the Microwave-Induced Photovoltage. JETP Letters, 2019, 110, 599-602.	0.4	2
41	Thermalization and Transport in Dense Ensembles of Triplet Magnetoexcitons. JETP Letters, 2019, 110, 284-289.	0.4	9
42	Thermodynamics of the Ising Quantum Hall Ferromagnets at $\nu = 2$. JETP Letters, 2018, 107, 106-110.	0.4	7
43	Direct observation of a \mathbb{Z}_2 topological phase transition in narrow AlAs quantum wells. Physical Review B, 2018, 97, .	1.1	15
44	Electron Spin Resonance in an AlAs Quantum Well near Filling Factor 1. JETP Letters, 2018, 108, 481-484.	0.4	7
45	Observation of "Dark" Axisymmetric Plasma Modes in a Single Disk of Two-Dimensional Electrons. JETP Letters, 2018, 108, 446-449.	0.4	4
46	Equilibrium and Nonequilibrium Spin Polarization near Filling Factor $3/2$. JETP Letters, 2018, 108, 419-422.	0.4	3
47	Two-Dimensional Triplet Magnetoexcitons and a Magnetofermionic Condensate in the GaAs/AlGaAs Heterostructures. Physics of the Solid State, 2018, 60, 1645-1652.	0.2	0
48	Drastic Reduction of Plasmon Damping in Two-Dimensional Electron Disks. Physical Review Letters, 2018, 121, 176804.	2.9	25
49	Renormalization of the Effective Electron Mass Governing the Period of Microwave-Induced Resistance Oscillations in ZnO/MgZnO Heterojunctions. JETP Letters, 2018, 107, 770-773.	0.4	6
50	Excited States of Magnetotriple. JETP Letters, 2018, 107, 96-99.	0.4	0
51	Long-Lived Magnetoexcitons and Two-Dimensional Magnetofermionic Condensate in GaAs/AlGaAs Heterostructure. Semiconductors, 2018, 52, 575-578.	0.2	0
52	Long-range non-diffusive spin transfer in a Hall insulator. Scientific Reports, 2018, 8, 10948.	1.6	17
53	Intersubband magnetoplasmon as a detector of the spin polarization in two-dimensional electron systems. JETP Letters, 2017, 105, 380-383.	0.4	2
54	Optical detection of magnetoplasma resonances in indirect-gap AlAs/AlGaAs quantum wells. JETP Letters, 2017, 106, 26-29.	0.4	4

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55	Azbel'-Kaner-like cyclotron resonance in a two-dimensional electron system. Physical Review B, 2017, 96, .	1.1	6
56	Renormalized Landau quasiparticle dispersion revealed by photoluminescence spectra from a two-dimensional Fermi liquid at the MgZnO/ZnO heterointerface. Physical Review B, 2017, 96, .	1.1	20
57	Size plasmonâ€ polariton resonance and its contribution to the giant enhancement of the Raman scattering. JETP Letters, 2017, 105, 677-681.	0.4	14
58	2D magnetofermionic condensate in GaAs/AlGaAs heterostructures. Low Temperature Physics, 2017, 43, 936-941.	0.2	0
59	Detection of spin excitation transfer in a two-dimensional electron system via photoluminescence of multiparticle exciton complexes. JETP Letters, 2017, 106, 682-685.	0.4	3
60	Combined dielectric and plasmon resonance for giant enhancement of Raman scattering. JETP Letters, 2016, 103, 508-512.	0.4	11
61	Magnetoplasma excitations and the effect of electron and hole velocity renormalization in free-hanging graphene studied by Raman scattering. JETP Letters, 2016, 104, 37-42.	0.4	2
62	Electron paramagnetic resonance study of the nuclear spin dynamics in an AlAs quantum well. JETP Letters, 2016, 104, 838-841.	0.4	2
63	Plasmonic interferometer for spectroscopy of microwave radiation. JETP Letters, 2016, 103, 380-384.	0.4	7
64	On the response time of plasmonic terahertz detectors. JETP Letters, 2016, 103, 792-794.	0.4	11
65	Long-lived two-dimensional triplet magnetoexcitons in a Hall insulator. Journal of Experimental and Theoretical Physics, 2016, 122, 525-530.	0.2	0
66	Fine structure of cyclotron resonance in a two-dimensional electron system. Physical Review B, 2016, 93, .	1.1	21
67	Fermi liquid effects and quasiparticle mass renormalization in a system of two-dimensional electrons with strong interaction. JETP Letters, 2015, 101, 693-698.	0.4	11
68	Observation of Microwave-Induced Magnetoresistance Oscillations in a ZnO/Mg x Zn1â€x O Heterojunction. JETP Letters, 2015, 102, 811-814.	0.4	7
69	Coherent and Incoherent Contributions to the Damping of Cyclotron Magnetoplasma Resonance for Two-Dimensional Electrons. JETP Letters, 2015, 102, 821-825.	0.4	5
70	Super-long life time for 2D cyclotron spin-flip excitons. Scientific Reports, 2015, 5, 10354.	1.6	34
71	Edge magnetoplasma excitations in a two-dimensional electron system with strong screening. JETP Letters, 2015, 102, 461-464.	0.4	7
72	Dispersion of volume relativistic magnetoplasma excitation in a gated two-dimensional electron system. JETP Letters, 2015, 102, 749-753.	0.4	4

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73	Resonance reflection of light from a $\hat{\nu} = 1/3$ Laughlin liquid. JETP Letters, 2015, 100, 581-584.	0.4	4
74	Observation of plasma waves with anomalously weak damping in a two-dimensional electron system. JETP Letters, 2015, 100, 648-651.	0.4	17
75	Novel Relativistic Plasma Excitations in a Gated Two-Dimensional Electron System. Physical Review Letters, 2015, 114, 106805.	2.9	44
76	Detecting the sign reversal of the g-factor of two-dimensional electrons in narrow GaAs/Al _x Ga _{1-x} As quantum wells. JETP Letters, 2015, 100, 746-750.	0.4	1
77	Interface contributions to the spin-orbit interaction parameters of electrons at the (001) GaAs/AlGaAs interface. JETP Letters, 2014, 100, 102-109.	0.4	20
78	Rayleigh scattering of light by two-dimensional electrons in a high magnetic field. JETP Letters, 2014, 98, 778-781.	0.4	5
79	Spin relaxation in GaAs/AlGaAs quantum wells in the vicinity of odd filling factors. JETP Letters, 2013, 97, 574-578.	0.4	4
80	Observation of plasma and magnetoplasma resonances of two-dimensional electrons in a single MgZnO/ZnO heterojunction. JETP Letters, 2013, 98, 223-226.	0.4	2
81	Long-range manifestation of surface-enhanced Raman scattering. JETP Letters, 2013, 98, 64-69.	0.4	32
82	Relationship between the giant enhancement of the Raman scattering and luminescence on nanostructured metallic surfaces. JETP Letters, 2013, 98, 342-347.	0.4	13
83	Observation of acoustic edge magnetoplasmons near the filling factor $\hat{\nu} = 1$. JETP Letters, 2012, 96, 536-540.	0.4	2
84	Occurrence of a gap in the spectrum of magnetoplasma excitations of a two-dimensional electron disk subjected to a strong in-plane magnetic field. JETP Letters, 2012, 96, 525-528.	0.4	3
85	Observation of hybrid plasmon-photon modes in microwave transmission of coplanar microresonators. Physical Review B, 2011, 83, .	1.1	68
86	Manifestations of incompressible strips in the edge magnetoplasmon spectrum in the quantum Hall effect regime. JETP Letters, 2011, 93, 657-660.	0.4	4
87	Study of edge magnetoplasma excitations in two-dimensional electron systems with various edge depletion profiles. JETP Letters, 2011, 94, 137-141.	0.4	6
88	Magnetoplasma resonance in a GaAs/AlGaAs quantum well in a strong parallel magnetic field. JETP Letters, 2011, 94, 397-400.	0.4	8
89	Experimental observation of edge magnetoplasma excitations in a two-dimensional electron system in the quantum-hall-effect regime. JETP Letters, 2010, 90, 667-671.	0.4	7
90	Spin relaxation of two-dimensional electrons in a hall ferromagnet. JETP Letters, 2010, 91, 357-360.	0.4	20

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91	Experimental investigation of plasma excitations in asymmetric stripes of two-dimensional electrons. JETP Letters, 2010, 92, 466-469.	0.4	1
92	Manifestation of collective effects in polarization-resolved recombination spectra of the completely filled zeroth Landau level of two-dimensional electrons. JETP Letters, 2010, 92, 600-606.	0.4	1
93	Interface D [±] complexes in a two-dimensional electron system. JETP Letters, 2010, 92, 607-612.	0.4	3
94	Large oscillations in the photoluminescence spectra of a GaAs quantum well in external magnetic fields: A direct measurement of charge transfer in an electron bilayer system. Physical Review B, 2009, 80, .	1.1	12
95	Dispersion of the excitations of fractional quantum Hall states. Science, 2009, 324, 1044-1047.	6.0	102
96	Effect of the in-plane magnetic field on the recombination radiation spectrum of spatially-separated electron-hole layers. JETP Letters, 2009, 89, 19-23.	0.4	1
97	Millimeter/submillimeter mixing based on the nonlinear plasmon response of two-dimensional electron systems. JETP Letters, 2009, 90, 197-201.	0.4	25
98	Plasma waves in a two-dimensional electron system laterally screened by a metallic gate. JETP Letters, 2009, 90, 539-543.	0.4	7
99	Hysteresis of giant intensity fluctuations of emission for two-dimensional electrons in the conditions for the integer quantum Hall effect. Semiconductors, 2009, 43, 69-74.	0.2	3
100	Measurement of cyclotron masses of spin-orbit-split quasi-two-dimensional holes in GaAs(100) narrow quantum wells. Journal of Experimental and Theoretical Physics, 2008, 107, 587-594.	0.2	1
101	Experimental determination of the mean free path of screened edge magnetoplasmons in a two-dimensional electron gas. JETP Letters, 2008, 87, 577-580.	0.4	4
102	Contactless measurement of the conductivity of two-dimensional electrons in the regime of microwave-induced giant magnetoresistance oscillations. JETP Letters, 2008, 88, 616-619.	0.4	15
103	Inelastic light scattering study of the $\nu=1$ quantum Hall ferromagnet. Physical Review B, 2008, 77, .	1.1	20
104	Spectra of magnetoplasma excitations in back-gate Hall bar structures. Physical Review B, 2007, 75, .	1.1	28
105	Measurement of the logarithmic component of the dispersion of a one-dimensional plasmon in narrow single strips of two-dimensional electrons. JETP Letters, 2007, 84, 560-564.	0.4	2
106	Cyclotron spin-flip mode in the extreme quantum limit. JETP Letters, 2007, 85, 118-121.	0.4	3
107	Hole-density dependence of the cyclotron mass of 2D holes in a GaAs(001) quantum well. JETP Letters, 2007, 85, 242-245.	0.4	5
108	Giant fluctuations in the radiation intensity of two-dimensional electrons under quantum Hall effect conditions. Physics of the Solid State, 2007, 49, 976-983.	0.2	2

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109	Measurement of the mean free path of edge magnetoplasmons revealed in the spectra of magnetic oscillations of photovoltage in a two-dimensional electron system under microwave radiation. JETP Letters, 2006, 83, 246-249.	0.4	9
110	Dispersion properties of plasma excitations in tunnel-coupled bilayer electron systems. JETP Letters, 2006, 83, 256-260.	0.4	5
111	Indirect excitons and double electron-hole layers in a wide single GaAs/AlGaAs quantum well in a strong electric field. JETP Letters, 2006, 83, 553-557.	0.4	18
112	Kinetics of indirect electron-hole recombination in a wide single quantum well in a strong electric field. JETP Letters, 2006, 84, 222-225.	0.4	14
113	Universal relation between hall conductivity and the damping constant of edge magnetoplasma resonances. JETP Letters, 2006, 84, 226-230.	0.4	2
114	Intersubband excitations in single-and double-layer electron systems in a parallel magnetic field. Journal of Experimental and Theoretical Physics, 2005, 101, 717-727.	0.2	0
115	Cyclotron spin-flip mode as the lowest-energy excitation of unpolarized integer quantum Hall states. Physical Review B, 2005, 72, .	1.1	47
116	Collective magnetoplasma excitations in two-dimensional electron rings. JETP Letters, 2004, 80, 124-129.	0.4	2
117	Observation of Retardation Effects in the Spectrum of Two-Dimensional Plasmons. Physical Review Letters, 2003, 90, 156801.	2.9	125
118	Cyclotron resonance of composite fermions. Nature, 2002, 415, 409-412.	13.7	73
119	Intersubband collective excitations in a quasi-two-dimensional electron system in external magnetic field. Journal of Experimental and Theoretical Physics, 2002, 95, 927-939.	0.2	1
120	Acoustic magnetoplasma excitations in double electron layers. JETP Letters, 2002, 76, 511-515.	0.4	2
121	Magneto-optics of composite fermions. Physics-Usppekhi, 2001, 44, 36-39.	0.8	0
122	Dimensional magnetoplasma resonance of 2D holes in (001) GaAs/AlGaAs quantum wells. JETP Letters, 2000, 72, 460-463.	0.4	9
123	Magnetoplasmon replica in the recombination radiation spectra of a quasi-two-dimensional electron gas in GaAs/AlGaAs quantum wells. JETP Letters, 1997, 66, 575-580.	0.4	0
124	Universal magnetoluminescence kinetics in magnetically frozen 2D electron systems. JETP Letters, 1996, 63, 133-138.	0.4	1
125	Raman spectroscopy of magnetoplasma excitations in a system of two-dimensional electrons in inclined and parallel magnetic fields. JETP Letters, 1996, 63, 1031-1035.	0.4	4
126	Influence of the electron-hole spatial separation on the magnetoluminescence measurements of the fractional-quantum-Hall-effect energy gaps. Physical Review B, 1994, 50, 11259-11262.	1.1	18

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127	Luminescence Measurements of Two-Dimensional Electrons in the Regime of the Integer and Fractional Quantum Hall Effects. <i>Physica Status Solidi (B): Basic Research</i> , 1992, 173, 271-280.	0.7	7
128	Reduction of the electron density in GaAs-Al _x Ga _{1-x} As single heterojunctions by continuous photoexcitation. <i>Physical Review B</i> , 1989, 40, 4179-4182.	1.1	102