

# Nelson Studart

## List of Publications by Year in descending order

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84  
papers

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citations

623734

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84  
docs citations

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times ranked

369  
citing authors

#	ARTICLE	IF	CITATIONS
1	Interface optical phonons in spheroidal dots: Raman selection rules. <i>Physical Review B</i> , 2002, 65, .	3.2	62
2	Multisubband electron transport in $\hat{\Gamma}$ -doped semiconductor systems. <i>Physical Review B</i> , 1995, 52, 8363-8371.	3.2	61
3	The structure and spectrum of the anisotropically confined two-dimensional Yukawa system. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 11627-11644.	1.8	57
4	Mobility of electrons in a quasi-one-dimensional conducting channel on the liquid-helium surface. <i>Physical Review B</i> , 1995, 51, 5977-5988.	3.2	50
5	Localization energy and effective mass of an electron on the surface of liquid helium. <i>Surface Science</i> , 1982, 113, 394-400.	1.9	43
6	Intersubband coupling and screening effects on the electron transport in a quasi-two-dimensional $\hat{\Gamma}$ -doped semiconductor system. <i>Journal of Applied Physics</i> , 1996, 80, 5809-5814.	2.5	38
7	Optical phonons in semiconductor quantum rods. <i>Solid State Communications</i> , 2004, 130, 477-480.	1.9	35
8	Electrodynamical properties of two-dimensional classical electron systems. <i>Physical Review A</i> , 1980, 22, 2860-2865.	2.5	32
9	Electron mobility in two coupled $\hat{\Gamma}$ layers. <i>Physical Review B</i> , 1995, 52, 11273-11276.	3.2	21
10	Polaronic state of electrons on the surface of liquid-helium films: A self-consistent treatment. <i>Physical Review B</i> , 1989, 39, 4133-4139.	3.2	20
11	Electron states in a quasi-one-dimensional charge channel over liquid helium in the presence of a transverse magnetic field. <i>Physical Review B</i> , 1995, 51, 2640-2643.	3.2	20
12	Decay of excited surface electron states in liquid helium and related relaxation phenomena induced by short-wavelength ripplons. <i>Low Temperature Physics</i> , 2010, 36, 565-575.	0.6	20
13	Dependence of the electron mobility on the acceptor concentration in Si $\hat{\Gamma}$ -doped GaAs. <i>Physical Review B</i> , 1995, 52, R2245-R2248.	3.2	17
14	Plasmon excitations in nondegenerate quasi-one-dimensional electron systems. <i>Physical Review B</i> , 1998, 57, R704-R707.	3.2	14
15	Properties of surface electrons on a helium film: Effects of the film thickness and substrate. <i>Physical Review B</i> , 1984, 29, 2584-2588.	3.2	13
16	Stark states in semiconductor quantum wells and superlattices. <i>Superlattices and Microstructures</i> , 1987, 3, 175-179.	3.1	13
17	Electron correlations in semiconductor heterostructures. <i>Physical Review B</i> , 1987, 36, 6677-6680.	3.2	12
18	Ripplon-limited mobility of surface electrons on thick films of $\text{He}_3$ over $\text{He}_4$ . <i>Physical Review B</i> , 1997, 55, 14473-14478.	3.2	12

#	ARTICLE	IF	CITATIONS
19	Quantum dot structures grown on Al containing quaternary material for infrared photodetection beyond $10\frac{1}{4}\mu\text{m}$ . Applied Physics Letters, 2007, 90, 173510.	3.3	12
20	Melting of classical two-dimensional electrons on a helium film: A molecular-dynamics study. Physical Review B, 1996, 54, 7046-7051.	3.2	11
21	Surface Electron Transport over a Helium Film. Journal of Low Temperature Physics, 2002, 126, 505-510.	1.4	11
22	Resonant tunneling through $\text{Al}_x\text{Ga}_{1-x}\text{As}/\text{GaAs}$ heterostructures. Superlattices and Microstructures, 1988, 4, 245-250.	3.1	10
23	Melting and orientational order of the screened Wigner crystal on helium films. Physical Review B, 2001, 64, .	3.2	10
24	Plasmon-phonon coupling in $\hat{\Gamma}$ -doped polar semiconductors. Physical Review B, 1997, 55, 1554-1562.	3.2	9
25	Multiple-photon peak generation near the $\hat{\Gamma}$ $10\frac{1}{4}\mu\text{m}$ range in quantum dot infrared photodetectors. Journal of Applied Physics, 2011, 109, 064510.	2.5	9
26	Infrared photocurrent with one- and two-photon absorptions in a double-barrier quantum well system. Journal of Applied Physics, 2011, 110, .	2.5	9
27	Nonlinear transport of electrons in a quasi-one-dimensional channel on the liquid-helium surface. Physical Review B, 1995, 52, 15509-15516.	3.2	8
28	Coupled phonon-ripplon modes in a single wire of electrons on the liquid-helium surface. Physical Review B, 1999, 60, 15562-15565.	3.2	8
29	Electron correlation effects in a wide channel from the $\hat{\Gamma}$ $1/2=1$ quantum Hall edge states. Physical Review B, 2001, 64, .	3.2	8
30	Electron transport in a quasi-one-dimensional channel on suspended helium films. Physical Review B, 2002, 66, .	3.2	8
31	Scattering of surface electrons over a superfluid helium film. Physical Review B, 2003, 67, .	3.2	8
32	Interacting many-polaron system in degenerate semiconductors. Physical Review B, 1993, 47, 6356-6362.	3.2	7
33	Edge helicons and repulsion of fundamental edge magnetoplasmons in the quantum Hall regime. Journal of Physics Condensed Matter, 1999, 11, 5143-5156.	1.8	7
34	Plasma dispersion of multisubband electron systems over liquid helium. Journal of Physics Condensed Matter, 2000, 12, 9563-9571.	1.8	7
35	Plasmon spectrum in low-dimensional electron systems over insulating cryogenic films: Screening, quantum degeneracy, and multisubband effects. Physical Review B, 2003, 68, .	3.2	7
36	Capillary waves in $\hat{\Gamma}$ $^3\text{He}$ solutions and the properties of localized electrons on the helium surface. Physical Review B, 1997, 55, R3370-R3373.	3.2	6

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37	Temperature effects on edge magnetoplasmons in the quantum Hall regime. Physical Review B, 2000, 61, 2703-2710.	3.2	6
38	Temperature effects on edge-state properties in the integer quantum Hall regime. Physical Review B, 2002, 65, .	3.2	6
39	Surface electron mobility over a helium film from Boltzmann and force-balance equations. Physical Review B, 2006, 74, .	3.2	6
40	Ground-state energy of the polaron gas in two-dimensional semiconductor microstructures. Physical Review B, 1988, 37, 10137-10142.	3.2	5
41	Effective field theory for hard-sphere fluids. Physical Review E, 1996, 53, 2350-2354.	2.1	5
42	Quantum transport in $\delta$ -doped quantum wells. Physical Review B, 1997, 55, 6708-6711.	3.2	5
43	Level-broadening effects on the inelastic light-scattering spectrum due to coupled plasmon-phonon modes in $\delta$ -doped semiconductors. Physical Review B, 1998, 57, 2276-2279.	3.2	5
44	Hidden Spin-Current Conservation in 2D Fermi Liquids. Physical Review Letters, 1999, 82, 3851-3854.	7.8	5
45	Polaron states of electrons in the anisotropic surface over liquid helium. Journal of Physics Condensed Matter, 2000, 12, 7341-7357.	1.8	5
46	Chemical potential of the low-dimensional multisubband Fermi gas. Journal of Physics Condensed Matter, 2010, 22, 465304.	1.8	5
47	Lifetime enhancement for multiphoton absorption in intermediate band solar cells. Journal Physics D: Applied Physics, 2017, 50, 305501.	2.8	5
48	Quantum-degeneracy effects in the mobility of the electron fluid on the surface of helium. Physical Review B, 1992, 46, 1857-1859.	3.2	4
49	Theory of electron transport in a two-dimensional layer on the solid hydrogen surface. Physical Review B, 1995, 51, 11068-11073.	3.2	4
50	Damping of interfacial waves in $^3\text{He}/^4\text{He}$ layered mixtures. Physical Review B, 1997, 56, 8988-8996.	3.2	4
51	Surface Electron Channels on Suspended Helium Films. Journal of Low Temperature Physics, 2005, 138, 403-408.	1.4	4
52	Plasma modes in the electron chain over a liquid helium film. Physical Review B, 2007, 75, .	3.2	4
53	Confinement effects on decay rate of surface electron states over liquid helium. Low Temperature Physics, 2008, 34, 385-387.	0.6	4
54	Exceptionally Narrow-Band Quantum Dot Infrared Photodetector. IEEE Journal of Quantum Electronics, 2012, 48, 1360-1366.	1.9	4

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55	Optical properties of $\delta$ -doped semiconductors: Plasmon-phonon coupling and Raman spectra. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 1998, 2, 267-271.	2.7	3
56	Intersubband plasmons in quasi-one-dimensional electron systems on a liquid helium surface. <i>Physical Review B</i> , 2003, 68, .	3.2	3
57	Magnetoplasmons in nondegenerate quantum wires on suspended helium films. <i>Physical Review B</i> , 2004, 70, .	3.2	3
58	Magnetoresistance of nondegenerate quantum electron channels formed on the surface of superfluid helium. <i>Physical Review B</i> , 2004, 69, .	3.2	3
59	Surface Electron Transport over a Liquid-Helium Film Covering a Smooth Solid Substrate. <i>Journal of Low Temperature Physics</i> , 2005, 138, 409-413.	1.4	3
60	Generation and control of spin-polarized photocurrents in GaMnAs heterostructures. <i>Applied Physics Letters</i> , 2014, 104, 022105.	3.3	3
61	Polaronic and Confinement Effects for Surface Electrons on Helium. <i>Physics and Chemistry of Materials With Low-dimensional Structures</i> , 1997, , 245-279.	1.0	3
62	Subband mixing in resonant magnetotunneling through double-barrier semiconductor nanostructures. <i>Journal of Applied Physics</i> , 1996, 79, 8475-8481.	2.5	2
63	Phase diagram and Wigner crystal of dipolar complexes in liquid helium. <i>Physical Review B</i> , 1998, 58, 2844-2850.	3.2	2
64	Polaron effects in electron channels on a helium film. <i>Physical Review B</i> , 2001, 64, .	3.2	2
65	Channel magnetotransport of surface electrons on superfluid helium. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 12, 950-952.	2.7	2
66	Plasma Modes of Low-Dimensional Electron Systems over a Helium Film. <i>Journal of Low Temperature Physics</i> , 2002, 126, 499-504.	1.4	2
67	Negative photoconductance in a biased multiquantum well with filter barriers. <i>Physical Review B</i> , 2014, 89, .	3.2	2
68	Energy spectrum of surface electrons over a $^3\text{He}$ - $^4\text{He}$ solution with a spatially non-uniform distribution of the light isotope. <i>Physica B: Condensed Matter</i> , 2017, 507, 41-45.	2.7	2
69	Magnetopolarons on the surface of helium films. <i>Journal of Low Temperature Physics</i> , 1995, 98, 67-79.	1.4	1
70	Energy states and kinetic properties of electrons in a quasi-one-dimensional channel over liquid helium in the presence of a transverse magnetic field. <i>European Physical Journal D</i> , 1996, 46, 311-312.	0.4	1
71	Mobility of surface electrons over the $^3\text{He}$ - $^4\text{He}$ microstratified solution. <i>Physica B: Condensed Matter</i> , 1998, 249-251, 672-675.	2.7	1
72	Conservation of spin current as a consequence of a 2D Fermi surface. <i>Physica B: Condensed Matter</i> , 2000, 280, 93-94.	2.7	1

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73	Mode damping of layered $^3\text{He}/^4\text{He}$ films over a solid substrate. <i>Physical Review B</i> , 2000, 62, 584-591.	3.2	1
74	Quasi-one-dimensional electron transport over the surface of a liquid-helium film. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 266-267.	2.7	1
75	Magnetoplasmons of the two-dimensional electron system in a parabolic channel over liquid helium. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 22, 775-778.	2.7	1
76	Generation of spin polarized currents with coherent trapping in magnetic semiconductors. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 135105.	2.8	1
77	Mobility of electrons in a quasi-one-dimensional conducting channel on the liquid helium surface. <i>European Physical Journal D</i> , 1996, 46, 309-310.	0.4	0
78	Molecular-dynamics studies of charge complexes in liquid helium. <i>Computational and Theoretical Chemistry</i> , 1999, 464, 87-93.	1.5	0
79	Effect of a periodic modulation on edge magnetoplasmons in the quantum Hall regime. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2000, 6, 569-572.	2.7	0
80	Two-subband electron transport in nonideal quantum wells. <i>Physical Review B</i> , 2000, 62, 10212-10219.	3.2	0
81	Plasma modes in low-dimensional electron system over surface of liquid helium. <i>Journal of Molecular Liquids</i> , 2005, 120, 189-191.	4.9	0
82	Phase transitions in the quantum Hall liquid in a quantum wire. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 34, 140-143.	2.7	0
83	EDGE MAGNETOPLASMONS AND EDGE HELICON IN QUANTUM HALL REGIME AT NOT-TOO-LOW TEMPERATURES. <i>International Journal of Modern Physics B</i> , 2009, 23, 2922-2926.	2.0	0
84	Plasma excitation dispersion in non-degenerate quantum wire over liquid helium. <i>European Physical Journal B</i> , 2017, 90, 1.	1.5	0