

Denis Scalbert

List of Publications by Year in descending order

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Simultaneous measurements of nuclear-spin heat capacity, temperature, and relaxation in GaAs microstructures. <i>Physical Review B</i> , 2022, 105, .	3.2	5
2	Complexity of the dipolar exciton Mott transition in GaN/(AlGa)N nanostructures. <i>Physical Review B</i> , 2021, 103, .	3.2	7
3	Electron-induced nuclear magnetic ordering in n -type semiconductors. <i>Physical Review B</i> , 2021, 103, .	3.2	5
4	Long-range spin jump diffusion revealed by dynamic light scattering. <i>Physical Review B</i> , 2021, 103, .	3.2	3
5	Spatiotemporal Spin Noise Spectroscopy. <i>Physical Review Letters</i> , 2019, 123, 017401.	7.8	14
6	Fundamental limits for nondestructive measurement of a single spin by Faraday rotation. <i>Physical Review B</i> , 2019, 99, .	3.2	3
7	Spin temperature concept verified by optical magnetometry of nuclear spins. <i>Physical Review B</i> , 2018, 97, .	3.2	21
8	Spin relaxation of indirect excitons in asymmetric coupled quantum wells. <i>Superlattices and Microstructures</i> , 2018, 122, 643-649.	3.1	4
9	Nuclear spin relaxation in n -GaAs: From insulating to metallic regime. <i>Physical Review B</i> , 2017, 95, .	3.2	20
10	Diluted Magnetic Semiconductors: Basic Physics and Optical Properties. <i>Springer Series in Solid-state Sciences</i> , 2017, , 477-524.	0.3	3
11	Carrier spin relaxation in diluted magnetic quantum wells: Effect of Mn spin correlations. <i>Physical Review B</i> , 2017, 96, .	3.2	1
12	Nuclear polaron beyond the mean-field approximation. <i>Physical Review B</i> , 2017, 95, .	3.2	8
13	Quantum limited heterodyne detection of spin noise. <i>Review of Scientific Instruments</i> , 2016, 87, 093111.	1.3	21
14	Influence of magnetic quantum confined Stark effect on the spin lifetime of indirect excitons. <i>Physical Review B</i> , 2016, 93, .	3.2	8
15	Intrinsic limitation of cavity-enhanced Faraday detection of spin noise in quantum wells and quantum dots. <i>Superlattices and Microstructures</i> , 2016, 92, 348-352.	3.1	2
16	Nonlinear optical spectroscopy of indirect excitons in coupled quantum wells. <i>Physical Review B</i> , 2015, 91, .	3.2	26
17	Measurements of nuclear spin dynamics by spin-noise spectroscopy. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	33
18	Atomic-like spin noise in solid-state demonstrated with manganese in cadmium telluride. <i>Nature Communications</i> , 2015, 6, 8121.	12.8	20

#	ARTICLE	IF	CITATIONS
19	Nondestructive Measurement of Nuclear Magnetization by Off-Resonant Faraday Rotation. Physical Review Letters, 2013, 111, 087603.	7.8	23
20	Electron spin dephasing in Mn-based II-VI diluted magnetic semiconductors. Physical Review B, 2013, 88, .	3.2	18
21	Anomalously large spin susceptibility enhancement in n-doped CdMnTe quantum wells. , 2013, , .		0
22	Optical Pump-Probe Detection of Manganese Hyperfine Beats in (Cd,Mn)Te Crystals. Physical Review Letters, 2013, 110, 077403.	7.8	16
23	Giant photoinduced Faraday rotation due to the spin-polarized electron gas in an n -GaAs microcavity. Physical Review B, 2012, 85, .	3.2	31
24	Spin waves in magnetic quantum wells with Coulomb interaction and exchange coupling. Physical Review B, 2011, 83, .	3.2	11
25	Collective nature of two-dimensional electron gas spin excitations revealed by exchange interaction with magnetic ions. Physical Review B, 2010, 82, .	3.2	14
26	Polariton-polariton interaction constants in microcavities. Physical Review B, 2010, 82, .	3.2	173
27	Polarization controlled nonlinear transmission of light through semiconductor microcavities. Physical Review B, 2009, 79, .	3.2	23
28	Dynamics of collective spin excitations in CdMnTe quantum wells. , 2009, , .		1
29	Time-resolved photoluminescence of delta-doped AlGaAs/GaAs heterostructures. Journal of Luminescence, 2008, 128, 1317-1322.	3.1	8
30	Polariton spin beats in semiconductor quantum well microcavities. Superlattices and Microstructures, 2008, 43, 417-426.	3.1	2
31	Electron spin relaxation in very diluted CdMnTe quantum wells. Superlattices and Microstructures, 2008, 43, 427-430.	3.1	6
32	Diluted Magnetic Semiconductors: Basic Physics and Optical Properties. Springer Series in Solid-state Sciences, 2008, , 389-431.	0.3	10
33	Dynamics of the localized spins interacting with two-dimensional electron gas: Coexistence of mixed and pure modes. Physical Review B, 2008, 78, .	3.2	20
34	Exciton and polariton spin beats in a CdMnTe based microcavity. AIP Conference Proceedings, 2007, , .	0.4	1
35	Linear dichroism in a GaAs microcavity. Superlattices and Microstructures, 2007, 41, 429-433.	3.1	6
36	Photoluminescence of σ -excitons in CdMnTe quantum well, embedded in a microcavity. Superlattices and Microstructures, 2007, 41, 386-391.	3.1	2

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37	Optically enhanced nuclear spin polarization in InP. AIP Conference Proceedings, 2007, , .	0.4	0
38	Observation of spin beats at the Rabi frequency in microcavities. Physical Review B, 2006, 74, .	3.2	23
39	Spontaneous magnetization patterning in diluted paramagnetic semiconductors: theory and experiment. , 2006, , .		0
40	Effect of holes on the dynamic polarization of nuclei in semiconductors. Physical Review B, 2006, 73, .	3.2	6
41	Coherent spin dynamics of exciton-polaritons in diluted magnetic microcavities. Physical Review B, 2006, 73, .	3.2	21
42	Exciton quantum beats in CdMnTe quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 910-913.	0.8	1
43	Spin quantum beats in CdMnTe microcavity. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3876-3879.	0.8	6
44	Spin Precession In A Model Structure For Spintronics. AIP Conference Proceedings, 2005, , .	0.4	1
45	Pattern formation in paramagnetic diluted magnetic semiconductors. Physical Review B, 2005, 71, .	3.2	9
46	Photon Bloch Oscillations in Porous Silicon Optical Superlattices. Physical Review Letters, 2004, 92, 097401.	7.8	127
47	Giant second-harmonic generation in a one-dimensional GaN photonic crystal. Physical Review B, 2004, 69, .	3.2	44
48	Softening of spin resonance at low temperature in p-doped Cd _{1-x} Mn _x Te quantum wells. Physical Review B, 2004, 70, .	3.2	11
49	Magnetic field switching of spin injection and spin coherence in magnetic quantum structures. Physica Status Solidi (B): Basic Research, 2004, 241, 688-691.	1.5	1
50	Imaging electron spin vector in semiconductors. Solid State Communications, 2003, 128, 403-406.	1.9	3
51	Optically induced instability of spin precession in magnetic quantum wells. Physical Review B, 2003, 67, .	3.2	16
52	Anomalous Mn Spin Resonance Detected by Time-Resolved Kerr Effect in CdMnTe Quantum Wells. Physica Status Solidi A, 2002, 190, 715-718.	1.7	1
53	Electron and hole spin relaxation in modulation-doped CdMnTe quantum wells. Physical Review B, 2001, 64, .	3.2	69
54	Magneto-optical determination of the valence-band offset in a CdTe/Cd _{1-x} Mn _x Te heterostructure. Physical Review B, 1999, 59, 10276-10282.	3.2	13

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55	Optical anisotropy in GaN grown onto A ⁺ plane sapphire. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 59, 159-162.	3.5	2
56	Negatively charged exciton formation in an asymmetric double CdTe/(Cd,Mn)Te QWs. Journal of Crystal Growth, 1999, 197, 680-683.	1.5	1
57	Slow Spin Relaxation Observed in InGaN/GaN Multiple Quantum Wells. Physica Status Solidi (B): Basic Research, 1999, 216, 341-345.	1.5	11
58	Chemical equilibrium between excitons, electrons, and negatively charged excitons in semiconductor quantum wells. Physical Review B, 1999, 59, 1602-1604.	3.2	67
59	Transient photo-reflectance of CdMnTe MBE layers: optical path modulation. Journal of Crystal Growth, 1998, 184-185, 980-983.	1.5	0
60	The s,p ⁺ d exchange interaction of Cd _{0.997} Cr _{0.003} S. Journal of Crystal Growth, 1998, 184-185, 1000-1004.	1.5	0
61	Optically induced nuclear magnetic field in InP. Physical Review B, 1998, 57, 4713-4719.	3.2	18
62	Magnetic-field-induced sign reversal of transient photorefectance in Cd _{1-x} Mn _x Te: Paramagnetic shift at low manganese concentration. Physical Review B, 1998, 58, 4522-4530.	3.2	1
63	Optical path modulation in transient photorefectance of CdMnTe layers. Physical Review B, 1998, 57, 8770-8773.	3.2	3
64	Bound magnetic polaron in Cr-based diluted magnetic semiconductors. Physical Review B, 1998, 58, 7024-7034.	3.2	16
65	Charged excitons trapped on monomolecular CdTe islands in wide ZnTe-(Zn,Mg)Te quantum wells. Physical Review B, 1998, 58, 15408-15411.	3.2	14
66	Donor bound or negatively charged excitons in thin CdTe/Cd _{1-x} Mn _x Te quantum wells. Physical Review B, 1998, 58, 4082-4088.	3.2	15
67	Anti-Stokes luminescence in nitrogen doped GaAs _{1-x} P _x alloys. EPJ Applied Physics, 1998, 1, 35-38.	0.7	0
68	Transient Photorefectance of DMS: Thermo-Magnetic Modulations and Magnetic Relaxation. Acta Physica Polonica A, 1998, 94, 177-187.	0.5	0
69	Zeeman splittings of excitonic transitions at the Γ^+ point in wurtzite GaN: A magnetorefectance investigation. Physical Review B, 1997, 56, R7108-R7111.	3.2	20
70	Determination of Zeeman splittings of excitonic transitions in wurtzite GaN by mean of magnetocircular dichroism technique. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 50, 126-129.	3.5	0
71	Spin ⁺ lattice relaxation in diluted magnetic semiconductors. Physica Status Solidi (B): Basic Research, 1996, 193, 189-204.	1.5	35
72	Magnetic relaxation studied by transient reflectivity in Cd _{1-x} Mn _x Te. Physical Review B, 1996, 53, R10461-R10464.	3.2	21

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73	Type-II GaAs/AlAs superlattices under high excitation. <i>Physica Status Solidi (B): Basic Research</i> , 1994, 183, 309-320.	1.5	7
74	Multiple-scattering corrections in diluted magnetic semiconductors: A plane-wave expansion. <i>Physical Review B</i> , 1993, 48, 17752-17757.	3.2	14
75	Type II GaAs/AlAs superlattices under high excitation. <i>European Physical Journal Special Topics</i> , 1993, 03, 245-248.	0.2	0
76	Wigner-Seitz approach to spin splitting. <i>Physical Review B</i> , 1992, 46, 9853-9856.	3.2	63
77	Recombination Processes in Short-Period GaAs _{1-x} Al _x Superlattices of Type II. <i>Physica Status Solidi (B): Basic Research</i> , 1992, 170, 637-651.	1.5	26
78	Interface roughness from $\hat{\Gamma}^c$ and X luminescence in type II GaAs superlattices with composition gradient. <i>Solid State Communications</i> , 1992, 84, 511-515.	1.9	8
79	High excitation effects in type II GaAs/AlAs superlattices. <i>Solid State Communications</i> , 1992, 84, 417-420.	1.9	0
80	$\hat{\Gamma}^c$ -X _z mixing in GaAs/AlAs superlattices of type II. <i>Solid State Communications</i> , 1992, 81, 35-40.	1.9	10
81	Magneto-optical properties of the Van Vleck semimagnetic semiconductor Cd _{1-x} Fe _x Se. II. The bound magnetic polaron. <i>Physical Review B</i> , 1991, 43, 7109-7126.	3.2	10
82	Magneto-optical properties of the Van Vleck semimagnetic semiconductor Cd _{1-x} Fe _x Se. I. The electronic structure of Fe ²⁺ . <i>Physical Review B</i> , 1991, 43, 7102-7108.	3.2	21
83	Antiferromagnetic exchange contribution to Van Vleck paramagnetism in Fe-based magnetic semiconductors. <i>Journal of Applied Physics</i> , 1991, 70, 6383-6385.	2.5	10
84	Anti-crossing of Raman lines: bound magnetic polaron in Cd _{1-x} Fe _x Se. <i>Journal of Crystal Growth</i> , 1990, 101, 900-904.	1.5	3
85	Resonant Raman scattering on low energy excited states of Fe ²⁺ in Cd _{1-x} Fe _x Se. <i>Journal of Crystal Growth</i> , 1990, 101, 940-943.	1.5	10
86	High field magnetization and exchange integrals in Cd _{1-x} Fe _x Se. <i>Solid State Communications</i> , 1990, 76, 977-980.	1.9	24
87	Exciton radiative lifetime in short period GaAs-AlAs superlattices of type II. <i>Surface Science</i> , 1990, 229, 464-467.	1.9	11
88	Anticrossing of Raman lines in Cd _{1-x} Fe _x Se: Van Vleck-type bound magnetic polaron. <i>Physical Review Letters</i> , 1989, 62, 2865-2868.	7.8	35
89	Resonant raman scattering on low energy excited states of Fe ²⁺ in Cd _{1-x} Fe _x Se. <i>Solid State Communications</i> , 1989, 69, 453-456.	1.9	43
90	Nature of the lowest electron states in short period GaAs-AlAs superlattices of type II. <i>Solid State Communications</i> , 1989, 70, 945-949.	1.9	73

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91	Spin-lattice relaxation in paramagnetic CdMnTe. Solid State Communications, 1988, 66, 571-574.	1.9	65
92	Bistability of magnetic polarons bound to acceptors in a wurtzite semimagnetic semiconductor. Physical Review B, 1988, 38, 13246-13256.	3.2	4
93	ANISOTROPIC BOUND MAGNETIC POLARON IN Cd _{1-x} Mn _x Se. Journal De Physique Colloque, 1988, 49, C8-879-C8-880.	0.2	0
94	Anisotropy of magnetic polarons bound to acceptors in Cd _{1-x} Mn _x Se. Physical Review B, 1986, 33, 4418-4420.	3.2	14