Francis Dujardin

List of Publications by Year
in descending order

123 papers	1,768 citations	257450 24 h-index	414414 32 g-index
123 all docs	123 docs citations	123 times ranked	536 citing authors

#	Article	IF	Citations
1	Influence of Geometrical Shape on the Characteristics of the Multiple InN/InxGa1â^'xN Quantum Dot Solar Cells. Nanomaterials, 2021, 11, 1317.	4.1	9
2	Wetting layer and size effects on the nonlinear optical properties of semi oblate and prolate Si0.7Ge0.3/Si quantum dots. Current Applied Physics, 2021, 25, 1-11.	2.4	19
3	Adjustment of Terahertz Properties Assigned to the First Lowest Transition of (D+, X) Excitonic Complex in a Single Spherical Quantum Dot Using Temperature and Pressure. Applied Sciences (Switzerland), 2021, 11, 5969.	2.5	4
4	Numerical modeling of the size effect in CdSe/ZnS and InP/ZnS-based Intermediate Band Solar Cells. Physica Scripta, 2021, 96, 035502.	2.5	4
5	Modeling the simultaneous effects of thermal and polarization in InGaN/GaN based high electron mobility transistors. Optik, 2020, 207, 163883.	2.9	11
6	Thermodynamic properties of SnO2/GaAs core/shell nanofiber. Physica A: Statistical Mechanics and Its Applications, 2020, 560, 125104.	2.6	8
7	Linear and nonlinear optical properties of a single dopant in GaN conical quantum dot with spherical cap. Philosophical Magazine, 2020, 100, 2503-2523.	1.6	13
8	Internal polarization electric field effects on the efficiency of InN/In<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si54.svg"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mtext>Ga</mml:mtext></mml:mrow> multiple quantum dot solar cells. Solar Energy, 2020, 201, 339-347.	6.1	16
9	Modeling the impact of temperature effect and polarization phenomenon on InGaN/GaN-Multi-quantum well solar cells. Optik, 2019, 199, 163385.	2.9	9
10	Binding energy of an exciton in a GaN/AlN nanodot: Role of size and external electric field. Physica B: Condensed Matter, 2019, 559, 23-28.	2.7	9
11	Excitonic nonlinear optical properties in AlN/GaN spherical core/shell quantum dots under pressure. MRS Communications, 2019, 9, 663-669.	1.8	9
12	Optical Absorption of Excitons in Strained Quasi 2D GaN Quantum Dot. Physica Status Solidi (B): Basic Research, 2019, 256, 1800361.	1.5	9
13	Impact of heavy hole levels on the photovoltaic conversion efficiency of In Ga1â^'N/InN quantum dot intermediate band solar cells. Superlattices and Microstructures, 2019, 129, 202-211.	3.1	8
14	Electronic and optical properties of layered van der Waals heterostructure based on MS₂ (M = Mo, W) monolayers. Materials Research Express, 2019, 6, 065060.	1.6	13
15	Role of a uniform magnetic field on the energy spectrum of a single donor in a core/shell spherical quantum dot. Chinese Journal of Physics, 2019, 57, 189-194.	3.9	8
16	Refractive index changes and optical absorption involving 1sâ€"1p excitonic transitions in quantum dot under pressure and temperature effects. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	16
17	Hysteresis loops and dielectric properties of a mixed spin Blumeâ€"Capel Ising ferroelectric nanowire. Physica A: Statistical Mechanics and Its Applications, 2018, 506, 499-506.	2.6	32
18	New way for determining electron energy levels in quantum dots arrays using finite difference method. Superlattices and Microstructures, 2018, 118, 256-265.	3.1	5

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19	Temperature and hydrostatic pressure effects on single dopant states in hollow cylindrical core-shell quantum dot. Applied Surface Science, 2018, 441, 204-209.	6.1	37
20	Optical and magneto optical responses assigned to probable processes of formation of exciton bound to an ionized donor in quantum dot. Current Applied Physics, 2018, 18, 452-460.	2.4	3
21	Electronic states and optical properties of single donor in GaN conical quantum dot with spherical edge. Superlattices and Microstructures, 2018, 114, 214-224.	3.1	12
22	Photovoltaic conversion efficiency of InN/In x Ga 1-x N quantum dot intermediate band solar cells. Physica B: Condensed Matter, 2018, 534, 10-16.	2.7	16
23	Excitonic binding energy in prolate and oblate spheroidal quantum dots. Superlattices and Microstructures, 2018, 114, 296-304.	3.1	14
24	Pressure effect on an exciton in a wurtzite AlN/GaN/AlN spherical core/shell quantum dot. MRS Communications, 2018, 8, 527-532.	1.8	7
25	Recombination energy for negatively charged excitons inside type-II core/shell spherical quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 101, 125-130.	2.7	6
26	Oscillator strength and quantum-confined Stark effect of excitons in a thin PbS quantum disk. International Journal of Modern Physics B, 2018, 32, 1750266.	2.0	5
27	Fundamental exciton transitions in SiO2/Si/SiO2 cylindrical core/shell quantum dot. Journal of Applied Physics, 2018, 124, 144303.	2.5	9
28	Electric field effect on the photoionization cross section of a single dopant in a strained AlAs/GaAs spherical core/shell quantum dot. Journal of Applied Physics, 2018, 124, .	2.5	19
29	Interplay between normal and abnormal stark shift according to the quantum dot spherical core/shell size ratio. Philosophical Magazine Letters, 2018, 98, 252-265.	1.2	8
30	Effect of conduction band non-parabolicity on bound polaron fundamental state in GaN/InN core shell quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 103, 188-193.	2.7	4
31	Hydrogenic donor in a CdSe/CdS quantum dot: Effect of electric field strength, nanodot shape and dielectric environment on the energy spectrum. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 104, 29-35.	2.7	7
32	Electronic state and photoionization cross section of a single dopant in GaN/InGaN core/shell quantum dot under magnetic field and hydrostatic pressure. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	15
33	Stark-shift of impurity fundamental state in a lens shaped quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 89, 119-123.	2.7	15
34	Photoionization cross section and binding energy of single dopant in hollow cylindrical core/shell quantum dot. Journal of Applied Physics, 2017, 121, .	2.5	30
35	Monte Carlo simulation of dielectric properties of a mixed spin-3/2 and spin-5/2 Ising ferrielectric nanowires. Ferroelectrics, 2017, 507, 58-68.	0.6	21
36	Spatial separation effect on the energies of uncorrelated and correlated electron-hole pair in CdSe/ZnS and InAs/InP core/shell spherical quantum dots. Superlattices and Microstructures, 2017, 109, 123-133.	3.1	20

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37	Donor impurity-related photoionization cross section in GaAs cone-like quantum dots under applied electric field. Philosophical Magazine, 2017, 97, 1445-1463.	1.6	27
38	Tunable excitonic transitions in strained GaAs ultra-thin quantum disk. Superlattices and Microstructures, 2017, 102, 382-390.	3.1	12
39	Some hysteresis loop features of 2D magnetic spin-1 Ising nanoparticle: shape lattice and single-ion anisotropy effects. Chinese Journal of Physics, 2017, 55, 2224-2235.	3.9	8
40	Linear and nonlinear magneto-optical properties of an off-center single dopant in a spherical core/shell quantum dot. Physica B: Condensed Matter, 2017, 524, 64-70.	2.7	35
41	On the electronic states in lens-shaped quantum dots. Physica Status Solidi (B): Basic Research, 2017, 254, 1700144.	1.5	7
42	Tuning the binding energy of on-center donor in CdSe/ZnTe core/shell quantum dot by spatial parameters and magnetic field strength. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 94, 96-99.	2.7	12
43	Shallow donor inside core/shell spherical nanodot: Effect of nanostructure size and dielectric environment on energy spectrum. Superlattices and Microstructures, 2017, 111, 976-982.	3.1	17
44	Magnetic field and dielectric environment effects on an exciton trapped by an ionized donor in a spherical quantum dot. Superlattices and Microstructures, 2017, 111, 1082-1092.	3.1	8
45	Hysteresis loop behaviors of a decorated double-walled cubic nanotube. Physica B: Condensed Matter, 2017, 524, 137-143.	2.7	7
46	Polaronic effects on the off-center donor impurity in AlAs/GaAs/SiO2 spherical core/shell quantum dots. Superlattices and Microstructures, 2017, 111, 457-465.	3.1	8
47	Energy spectrum of an exciton in a CdSe/ZnTe type-II core/shell spherical quantum dot. Superlattices and Microstructures, 2017, 101, 40-48.	3.1	20
48	Magnetic behaviors of a transverse spin-1/2 Ising cubic nanowire with core/shell structure. Physica B: Condensed Matter, 2017, 507, 51-60.	2.7	5
49	Linear and nonlinear optical properties of a single dopant in strained AlAs/GaAs spherical core/shell quantum dots. Optics Communications, 2017, 383, 231-237.	2.1	53
50	Hysteresis loops and dielectric properties of compositionally graded (Ba,Sr)TiO 3 thin films described by the transverse Ising model. Chinese Journal of Physics, 2016, 54, 533-544.	3.9	10
51	Control of the binding energy by tuning the single dopant position, magnetic field strength and shell thickness in ZnS/CdSe core/shell quantum dot. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, 303-309.	2.7	21
52	Some characteristic behaviours of a spin-1/2 Ising nanoparticle. Journal of Physics: Conference Series, 2016, 758, 012023.	0.4	2
53	Phase diagrams of a transverse cubic nanowire with diluted surface shell. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	6
54	Size dependence of the polarizability and Haynes rule for an exciton bound to an ionized donor in a single spherical quantum dot. Journal of Applied Physics, 2015, 117, .	2.5	23

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55	Thermodynamic Properties of the Core/Shell Antiferromagnetic Ising Nanocube. Journal of Superconductivity and Novel Magnetism, 2015, 28, 3127-3133.	1.8	8
56	Theoretical investigation of single dopant in core/shell nanocrystal in magnetic field. Superlattices and Microstructures, 2015, 85, 581-591.	3.1	27
57	Effect of Seeding Layers on Hysteresis Loops and Phase Transition of the Ferroelectric Thin Film. Ferroelectrics, 2015, 478, 1-10.	0.6	0
58	Polarization effects on spectra of spherical core/shell nanostructures: Perturbation theory against finite difference approach. Physica B: Condensed Matter, 2015, 458, 73-84.	2.7	11
59	The Magnetic Properties of Multi-surface Transverse Ferroelectric Ising Thin Films. Journal of Superconductivity and Novel Magnetism, 2015, 28, 877-883.	1.8	0
60	Magnetic Properties of a Transverse Ising Nanoparticle. Journal of Superconductivity and Novel Magnetism, 2015, 28, 885-890.	1.8	10
61	Thermodynamic properties and hysteresis behaviors of a mixed spin-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si37.gif" overflow="scroll"><mml:mrow><mml:mfrac><mml:mrow><mml:mn>3</mml:mn></mml:mrow><mml:mrow><mml:mn>2</mml:mn> spin-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si38.gif" overflow="scroll"><mml:mrow><mml:mfrac><mml:mrow><mml:mn>1</mml:mn></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Superlattices and Microstructures, 2014, 75, 761-774.	3.1	46
62	Dielectric Properties and Hysteresis Loops of a Ferroelectric Nanoparticle System Described by the Transverse Ising Model. Journal of Superconductivity and Novel Magnetism, 2014, 27, 2153-2162.	1.8	9
63	The dielectric properties and the hysteresis loops of the spin-1 Ising nanowire system with the effect of a negative core/shell coupling: A Monte Carlo study. Superlattices and Microstructures, 2014, 73, 121-135.	3.1	28
64	Ground state energy and wave function of an off-centre donor in spherical core/shell nanostructures: Dielectric mismatch and impurity position effects. Physica B: Condensed Matter, 2014, 449, 261-268.	2.7	28
65	Magnetic Properties of Diluted Magnetic Nanowire. Journal of Superconductivity and Novel Magnetism, 2013, 26, 201-211.	1.8	17
66	Phase diagrams of diluted transverse Ising nanowire. Journal of Magnetism and Magnetic Materials, 2013, 336, 75-82.	2.3	30
67	Lateral induced dipole moment and polarizability of excitons in a ZnO single quantum disk. Journal of Applied Physics, 2013, 113, 064314.	2.5	15
68	Monte Carlo Study of Long-Range Interactions of a Ferroelectric Bilayer with Antiferroelectric Interfacial Coupling. Journal of Superconductivity and Novel Magnetism, 2013, 26, 3075-3083.	1.8	6
69	Effect of a lateral electric field on an off-center single dopant confined in a thin quantum disk. Journal of Applied Physics, 2012, 111, .	2.5	28
70	Pyroelectric, dielectric properties and hysteresis loops of a ferroelectric bilayer system described by the transverse Ising model with long-range interactions. Physica Scripta, 2012, 86, 045704.	2.5	15
71	Hysteresis loops and susceptibility of a transverse Ising nanowire. Journal of Magnetism and Magnetic Materials, 2012, 324, 2434-2441.	2.3	70
72	The ferroelectric properties of films with defect layers. Physica Scripta, 2011, 83, 055704.	2.5	1

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73	Modeling the influence of the seeding layer on the transition behavior of a ferroelectric thin film. Thin Solid Films, 2011, 520, 646-650.	1.8	2
74	The Magnetic Properties of the Spin-1 Ising System withÂtheÂEffect of the Transverse Crystal Field. Journal of Superconductivity and Novel Magnetism, 2011, 24, 571-575.	1.8	6
75	Effects of Biaxial Crystal Field on the Magnetic Properties onÂaÂSpin-1ÂIsingÂSystem. Journal of Superconductivity and Novel Magnetism, 2011, 24, 577-584.	1.8	1
76	Stark shift and dissociation process of an ionized donor bound exciton in spherical quantum dots. European Physical Journal B, 2010, 74, 507-516.	1.5	27
77	The magnetic properties of disordered Feâ€“Al alloy system. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 3427-3434.	2.6	11
78	On the anomalous Stark effect in a thin disc-shaped quantum dot. Journal of Physics Condensed Matter, 2010, 22, 375301.	1.8	24
79	The effects of surface transition layers on the phase diagrams and the pyroelectric properties of ferroelectric thin films. Physica Status Solidi (B): Basic Research, 2009, 246, 1723-1730.	1.5	5
80	Exact analytical solutions for shallow impurity states in symmetrical paraboloidal and hemiparaboloidal quantum dots. Open Physics, 2008, 6, 97-104.	1.7	7
81	Magneto-bound polaron in CdSe spherical quantum dots: strong coupling approach. Physica E: Low-Dimensional Systems and Nanostructures, 2005, 25, 366-373.	2.7	36
82	Effect of charge carrierâ€“phonon coupling on the energy of shallow donors in CdSe quantum dots. Physica Status Solidi (B): Basic Research, 2003, 240, 106-115.	1.5	8
83	Magnetic field effect on the polarizability of bound polarons in quantum nanocrystallites. Physical Review B, 2003, 68, .	3.2	31
84	Excitons in InP/InAs inhomogeneous quantum dots. Journal of Physics Condensed Matter, 2003, 15, 175-184.	1.8	7
85	Binding energy of excitons in inhomogeneous quantum dots under uniform electric field. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 15, 99-106.	2.7	24
86	Low Magnetic Field Effect on the Polarisability of Excitons in Spherical Quantum Dots. Physica Scripta, 2001, 64, 504-508.	2.5	11
87	Surface effects in the ferromagnet spin-1/2 Ising model of an alternating magnetic superlattice. Surface Science, 2001, 482-485, 1068-1076.	1.9	0
88	The magnetic properties of a ferrimagnetic multilayer system with disordered interfaces. Surface Science, 2001, 482-485, 981-988.	1.9	4
89	The ferromagnetic spin-1 Ising superlattice in a transverse field. Physica A: Statistical Mechanics and Its Applications, 2001, 291, 399-409.	2.6	3
90	Electric Field Effect on the Energy of an Off-Centre Donor in Quantum Crystallites. Physica Scripta, 2001, 63, 329-335.	2.5	30

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91	The Ferromagnetic Spin-1 Ising Superlattice. Physica Scripta, 2001, 63, 416-421.	2.5	0
92	Magnetic properties of the site-diluted spin-1 Ising superlattice. Physical Review B, 2001, 63, .	3.2	11
93	The phase diagrams of the site-diluted spin- ising model of an alternating magnetic superlattice. Journal of Magnetism and Magnetic Materials, 2000, 210, 366-376.	2.3	3
94	The transverse spin-1 Ising film. Journal of Physics Condensed Matter, 2000, 12, 43-53.	1.8	16
95	Theoretical comparative study of negatively and positively charged excitons inGaAs/Ga1â^ˆ'xAlxAssemiconductor quantum wells. Physical Review B, 2000, 61, 7231-7232.	3.2	19
96	Magnetic Field Influence on the Polarisability of Donors in Quantum Crystallites. Physica Scripta, 2000, 62, 88-91.	2.5	25
97	Phase Transitions of Ferromagnetic Ising Films with Amorphous Surfaces. Physica Scripta, 1999, 59, 72-76.	2.5	7
98	The order parameters of a spin-1 Ising film in a transverse field. Journal of Physics Condensed Matter, 1999, 11, 2087-2102.	1.8	22
99	Phase diagrams of the site-diluted spin-12Ising superlattice. Physical Review B, 1999, 60, 4149-4157.	3.2	23
100	Magnetic properties of a diluted transverse spin- Ising film. Physica A: Statistical Mechanics and Its Applications, 1999, 262, 518-533.	2.6	4
101	The site-diluted spin- Ising film. Physica A: Statistical Mechanics and Its Applications, 1999, 269, 329-343.	2.6	10
102	The ferromagnet spin-1/2 Ising superlattice in a transverse field. Physica A: Statistical Mechanics and Its Applications, 1999, 269, 322-328.	2.6	14
103	Magnetic properties of a transverse spin-12Ising film. Physical Review B, 1999, 59, 6908-6918.	3.2	39
104	The critical behavior of an amorphous ferromagnet spinâˆ'1/2 Ising film with amorphous surfaces. Journal of Non-Crystalline Solids, 1999, 250-252, 735-739.	3.1	0
105	Optical and magneto-optical absorption of negatively charged excitons in three- and two-dimensional semiconductors. Physical Review B, 1998, 58, 9926-9932.	3.2	75
106	Excitonic trionXâˆ'in semiconductor quantum wells. Physical Review B, 1997, 56, 12454-12461.	3.2	68
107	Binding energy of negatively charged excitons in semiconductor quantum well with uniform electric field. Solid State Communications, 1997, 102, 579-582.	1.9	5
108	Ground state energy of the negatively charged exciton Xâˆ' in bidimensional semiconductors in a steady electric field. Solid State Communications, 1997, 103, 515-518.	1.9	7

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109	Electric Field Effects on Charged Excitons in Semiconductors. Physica Status Solidi (B): Basic Research, 1997, 201, 521-528.	1.5	6
110	Band structure of very narrow InGaAs/InP quantum wells with gradual interface effects. Superlattices and Microstructures, 1997, 22, 181-187.	3.1	2
111	Exciton bound to an ionized donor impurity in semiconductor spherical quantum dots. Physical Review B, 1996, 54, 17785-17793.	3.2	32
112	Valence band structure of very narrow InGaAs/InP quantum wells. Solid State Communications, 1996, 98, 297-301.	1.9	3
113	Giant oscillator strengths of ionized donor bound excitons in semiconductor quantum crystallites. Solid State Communications, 1996, 100, 217-220.	1.9	9
114	Landau levels of two-dimensional negatively charged three-particle Coulomb states. Journal of Physics Condensed Matter, 1996, 8, 5383-5392.	1.8	20
115	Existence of an exciton bound to an ionized donor impurity in semiconductor quantum crystallites. Solid State Communications, 1994, 90, 651-654.	1.9	5
116	Neutral Bound Excitons at Intermediate to High Magnetic Fields. Springer Series in Solid-state Sciences, 1989, , 562-566.	0.3	0
117	Binding Energies of Neutral Bound Excitons for Intermediate to High Magnetic Fields. Physica Status Solidi (B): Basic Research, 1988, 150, 201-209.	1.5	0
118	Neutral acceptor bound excitons: Interparticle distances and validity of the pseudoâ€donor model. Physica Status Solidi (B): Basic Research, 1987, 140, K117.	1.5	7
119	Neutral Bound Excitons in a High Magnetic Field. Physica Status Solidi (B): Basic Research, 1987, 141, 559-566.	1.5	4
120	Neutral Bound Excitons in a Low Magnetic Field. Physica Status Solidi (B): Basic Research, 1984, 126, 329-334.	1.5	5
121	Neutral bound excitons in a magnetic field. , 1983, , 276-280.		0
122	Attempt to determine the band parameters of graphite by a theoretical calculation. Journal De Physique, 1981, 42, 1167-1174.	1.8	1
123	Etude de la resistivitÃ© de corps pulvÃ©rulents Ã base de carbone en fonction de la compression. Carbon, 1979, 17, 237-241.	10.3	9