El mustapha Feddi

List of Publications by Year
in descending order

110 papers	1,578 citations	257450 24 h-index	434195 31 g-index
110 all docs	110 docs citations	110 times ranked	596 citing authors

#	Article	IF	Citations
1	Polaronic corrections on magnetization and thermodynamic properties of electronâ€“electron in 2D systems with Rashba spinâ€“orbit coupling. Journal of Magnetism and Magnetic Materials, 2022, 551, 169042.	2.3	4
2	Impact of loss mechanisms through defects on Sb2(S1-xSex)3/CdS solar cells with p-n structure. European Physical Journal Plus, 2022, 137, 1.	2.6	7
3	Ab initio study on electronic and optical properties of Cu2NiGeS4 for photovoltaic applications. Solar Energy, 2022, 237, 333-339.	6.1	5
4	LO-Phonons and dielectric polarization effects on the electronic properties of doped GaN/InN spherical core/shell quantum dots in a nonparabolic band model. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	5
5	Impact of conduction band non-parabolicity and dielectric mismatch on photoionization cross section of donor bound polaron in spherical GaN/InN core-shell nanoparticle. EPJ Applied Physics, 2021, 93, 10401.	0.7	3
6	Magnetic properties of exciton trapped by an off-center ionized donor in single quantum dot. Current Applied Physics, 2021, 23, 1-7.	2.4	1
7	The nonlinear optical absorption in $$hbox {Al}_{{x}}hbox {Ga}_{1-x}$$As/GaAs double-graded quantum wells: magnetic field effect and the position-dependent effective mass effect. European Physical Journal Plus, 2021, 136, 1.	2.6	11
8	Influence of Geometrical Shape on the Characteristics of the Multiple InN/InxGa1â^'xN Quantum Dot Solar Cells. Nanomaterials, 2021, 11, 1317.	4.1	9
9	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
10	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
11	Quantum Confined Stark Effect on the Linear and Nonlinear Optical Properties of SiGe/Si Semi Oblate and Prolate Quantum Dots Grown in Si Wetting Layer. Nanomaterials, 2021, 11, 1513.	4.1	11
12	Non-resonant intense laser field effect on the nonlinear optical properties associated to the inter- and intra-band transitions in an anharmonic quantum well submitted to electric and magnetic field. Solid State Communications, 2021, 334-335, 114390.	1.9	4
13	A proposal to enhance SnS solar cell efficiency: the incorporation of SnSSe nanostructures. Journal Physics D: Applied Physics, 2021, 54, 505501.	2.8	3
14	Anisotropy of effective masses induced by strain in Janus MoSSe and WSSe monolayers. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114826.	2.7	7
15	Strain Effects on the Electronic and Optical Properties of Kesterite Cu2ZnGeX4 (X = S, Se): First-Principles Study. Nanomaterials, 2021, 11, 2692.	4.1	11
16	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
17	Theoretical study of electronic properties and chemical stability of cubic phase zirconia nanowires. Physica Scripta, 2021, 96, 125879.	2.5	1
18	Optoelectronic properties of phosphorene quantum dots functionalized with free base porphyrins. Computational Materials Science, 2020, 171, 109278.	3.0	5

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19	Influence of position-dependent effective mass on the nonlinear optical properties in Al Ga1â^'As/GaAs single and double triangular quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 115, 113707.	2.7	36
20	Strain effects on the electronic and optical properties of Van der Waals heterostructure MoS2/WS2: A first-principles study. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 116, 113799.	2.7	26
21	Revisiting the adiabatic approximation for bound states calculation in axisymmetric and asymmetrical quantum structures. Superlattices and Microstructures, 2020, 138, 106384.	3.1	8
22	Effect of lattice deformation on electronic and optical properties of CuGaSe2: Ab-initio calculations. Thin Solid Films, 2020, 696, 137783.	1.8	9
23	Modeling the simultaneous effects of thermal and polarization in InGaN/GaN based high electron mobility transistors. Optik, 2020, 207, 163883.	2.9	11
24	Thermodynamic properties of SnO2/GaAs core/shell nanofiber. Physica A: Statistical Mechanics and Its Applications, 2020, 560, 125104.	2.6	8
25	Optical Absorption Coefficient on-center donor impurity in a spherical core/shell quantum dots. MATEC Web of Conferences, 2020, 330, 01041.	0.2	0
26	Excitons in spherical quantum dots revisited: analysis of colloidal nanocrystals. European Physical Journal B, 2020, 93, 1.	1.5	4
27	Phonons correction of the energy and photoionization cross section in polar semiconductors and hollow nanoparticles. Journal of Materials Research, 2020, 35, 2077-2086.	2.6	2
28	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
29	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
30	Forecasting and analysis of nonlinear optical responses by tuning the thickness of a doped hollow cylindrical quantum dot. Chinese Journal of Physics, 2020, 66, 444-452.	3.9	21
31	Donor impurity energy and optical absorption in spherical sector quantum dots. Heliyon, 2020, 6, e03194.	3.2	15
32	Geometrical confinement effects on fundamental thermal properties of rutile and anatase TiO₂ cylindrical and tubular nanostructures. Physica Scripta, 2020, 95, 105706.	2.5	2
33	The effect of temperature, hydrostatic pressure and magnetic field on the nonlinear optical properties of AlGaAs/GaAs semi-parabolic quantum well. International Journal of Modern Physics B, 2019, 33, 1950325.	2.0	20
34	Modeling the impact of temperature effect and polarization phenomenon on InGaN/GaN-Multi-quantum well solar cells. Optik, 2019, 199, 163385.	2.9	9
35	Hydrothermal Synthesis and Characterization of Mn-Doped VO2 Nanowires. MRS Advances, 2019, 4, 829-836.	0.9	2
36	Excitonic nonlinear optical properties in AlN/GaN spherical core/shell quantum dots under pressure. MRS Communications, 2019, 9, 663-669.	1.8	9

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37	Magneto-optical effect in GaAs/GaAlAs semi-parabolic quantum well. Thin Solid Films, 2019, 682, 10-17.	1.8	58
38	One- and two-photon-induced magneto-optical properties of hyperbolic-type quantum wells. Optik, 2019, 185, 1261-1269.	2.9	6
39	Optical Absorption of Excitons in Strained Quasi 2D GaN Quantum Dot. Physica Status Solidi (B): Basic Research, 2019, 256, 1800361.	1.5	9
40	Impact of heavy hole levels on the photovoltaic conversion efficiency of In Ga1âˆ'N/InN quantum dot intermediate band solar cells. Superlattices and Microstructures, 2019, 129, 202-211.	3.1	8
41	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
42	Electronic states in GaAs-(Al,Ga)As eccentric quantum rings under nonresonant intense laser and magnetic fields. Scientific Reports, 2019, 9, 1427.	3.3	46
43	Control of simultaneous effects of the temperature, indium composition and the impact ionization process on the performance of the InN/InxGa1-xN quantum dot solar cells. Opto-electronics Review, 2019, 27, 25-31.	2.4	6
44	Effect of Conduction Band Non-Parabolicity on the Nonlinear Optical Properties in GaAs/Ga1âˆ'xAlxAs Double Semi-V-shaped Quantum Wells. Materials, 2019, 12, 78.	2.9	21
45	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
46	Impact of electron-LO-phonon correction and donor impurity localization on the linear and nonlinear optical properties in spherical core/shell semiconductor quantum dots. Journal of Alloys and Compounds, 2018, 753, 68-78.	5.5	17
47	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
48	Fluorescence Studies of Fe3O4-Au Hybrid Nanoparticles. MRS Advances, 2018, 3, 725-731.	0.9	0
49	Wetting layer effect on impurity-related electronic properties of different (In,Ga)N QD-shapes. Physica B: Condensed Matter, 2018, 537, 207-211.	2.7	5
50	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
51	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
52	Linear and nonlinear magneto-optical properties of monolayer MoS2. Journal of Applied Physics, 2018, 123, .	2.5	29
53	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
54	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

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55	Excitonic binding energy in prolate and oblate spheroidal quantum dots. Superlattices and Microstructures, 2018, 114, 296-304.	3.1	14
56	Tuning the Electronic and Optical Properties of Two-Dimensional Graphene-like $$hbox {C}_2hbox {N}$$ C 2 N Nanosheet by Strain Engineering. Journal of Electronic Materials, 2018, 47, 4594-4603.	2.2	15
57	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
58	Optical Absorption and Electroabsorption Related to Electronic and Single Dopant Transitions in Holey Elliptical GaAs Quantum Dots. Physica Status Solidi (B): Basic Research, 2018, 255, 1700470.	1.5	13
59	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
60	Fundamental exciton transitions in SiO2/Si/SiO2 cylindrical core/shell quantum dot. Journal of Applied Physics, 2018, 124, 144303.	2.5	9
61	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
62	Characteristics and parameters extracting of sub cells in dual-junction solar cells via capacitance-voltage measurement. , 2018, , .		0
63	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
64	Effects of Geometry on the Electronic Properties of Semiconductor Elliptical Quantum Rings. Scientific Reports, 2018, 8, 13299.	3.3	33
65	MD simulation-based study on the thermodynamic, structural and liquid properties of gold nanostructures. Materials Chemistry and Physics, 2018, 218, 116-121.	4.0	20
66	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
67	First principles study on the electronic properties and Schottky barrier of Graphene/InSe heterostructure. Superlattices and Microstructures, 2018, 122, 570-576.	3.1	28
68	Effect of strains on electronic and optical properties of monolayer SnS: Ab-initio study. Physica B: Condensed Matter, 2018, 545, 255-261.	2.7	21
69	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
70	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
71	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
72	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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73	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
74	Tunable excitonic transitions in strained GaAs ultra-thin quantum disk. Superlattices and Microstructures, 2017, 102, 382-390.	3.1	12
75	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
76	On the electronic states in lens-shaped quantum dots. Physica Status Solidi (B): Basic Research, 2017, 254, 1700144.	1.5	7
77	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
78	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
79	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
80	Optical Transitions in Strained Wurtzite GaN Ultrathin Quantum Disk Under Hydrostatic Pressure Effects. Current Nanoscience, 2017, 13, .	1.2	2
81	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
82	Hydrogenic donor impurity in InAs/GaAs core/shell quantum dots: Effect of the dielectric environnement. , 2016, , .		0
83	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
84	The simultaneous effects of the hydrostatic pressure and magnetic field on the donor confined in inhomogeneous quantum dots. , 2015, , .		0
85	Theoretical investigation of single dopant in core/shell nanocrystal in magnetic field. Superlattices and Microstructures, 2015, 85, 581-591.	3.1	27
86	Excitonic transitions in spherical inhomogeneous QD, new monocolor nanosource. Physica B: Condensed Matter, 2015, 477, 100-104.	2.7	7
87	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
88	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
89	Lateral induced dipole moment and polarizability of excitons in a ZnO single quantum disk. Journal of Applied Physics, 2013, 113, 064314.	2.5	15
90	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

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91	Finite difference numerical solution of Poisson equation in a Schottky barrier diode using maple. , 2011, , .		0
92	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
93	On the anomalous Stark effect in a thin disc-shaped quantum dot. Journal of Physics Condensed Matter, 2010, 22, 375301.	1.8	24
94	Exact analytical solutions for shallow impurity states in symmetrical paraboloidal and hemiparaboloidal quantum dots. Open Physics, 2008, 6, 97-104.	1.7	7
95	Exact Analytical Expressions of GraÃ«tz Bridge Currents and Voltages Using Lambert W Function. , 2007, , .		1
96	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
97	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
98	Parametrized equations for excitons in two-dimensional semiconductor quantum wells with arbitrary potential profiles. Semiconductor Science and Technology, 2003, 18, 377-384.	2.0	9
99	Magnetic field effect on the polarizability of bound polarons in quantum nanocrystallites. Physical Review B, 2003, 68, .	3.2	31
100	Excitons in InP/InAs inhomogeneous quantum dots. Journal of Physics Condensed Matter, 2003, 15, 175-184.	1.8	7
101	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
102	Low Magnetic Field Effect on the Polarisability of Excitons in Spherical Quantum Dots. Physica Scripta, 2001, 64, 504-508.	2.5	11
103	Electric Field Effect on the Energy of an Off-Centre Donor in Quantum Crystallites. Physica Scripta, 2001, 63, 329-335.	2.5	30
104	Magnetic Field Influence on the Polarisability of Donors in Quantum Crystallites. Physica Scripta, 2000, 62, 88-91.	2.5	25
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	Ground state energy of the negatively charged exciton Xâ^' in bidimensional semiconductors in a steady electric field. Solid State Communications, 1997, 103, 515-518.	1.9	7
107	Electric Field Effects on Charged Excitons in Semiconductors. Physica Status Solidi (B): Basic Research, 1997, 201, 521-528.	1.5	6
108	Binding Energy of the Excitonic Ions X^{â^'} and X in a Weak Electric Field. Physica Status Solidi (B): Basic Research, 1993, 175, 349-354.	1.5	4

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109	Excitonic trions in a low magnetic field. Physical Review B, 1987, 35, 4331-4337.	3.2	25
110	Landau oscillations of excitonic trions. Journal of Physics C: Solid State Physics, 1986, 19, L699-L703.	1.5	1