Krzysztof Fronc

List of Publications by Year
in descending order

116	1,321	394421	434195
papers	citations	19 h-index	31 g-index

118	118	118	1815
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	XPS and XRD study of crystalline 3C-SiC grown by sublimation method. Journal of Alloys and Compounds, 1999, 286, 143-147.	5.5	103
2	Molecularly Imprinted Polymer (MIP) Film with Improved Surface Area Developed by Using Metalâ€“Organic Framework (MOF) for Sensitive Lipocalin (NGAL) Determination. ACS Applied Materials & Interfaces, 2016, 8, 19860-19865.	8.0	61
3	Cathodoluminescence study of diluted magnetic semiconductor quantum well/micromagnet hybrid structures. Applied Physics Letters, 2001, 79, 1789-1791.	3.3	53
4	Molecularly imprinted polymer based extended-gate field-effect transistor chemosensors for phenylalanine enantioselective sensing. Journal of Materials Chemistry C, 2017, 5, 969-977.	5.5	46
5	Magnetic polaron formation and exciton spin relaxation in single Cd<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>Mn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow>	3.2	44
6	Yttrium-Doped Iron Oxide Nanoparticles for Magnetic Hyperthermia Applications. Journal of Physical Chemistry C, 2020, 124, 6871-6883.	3.1	44
7	Spin Filtering in a Hybrid Ferromagnetic-Semiconductor Microstructure. Physical Review Letters, 2004, 93, 246601.	7.8	43
8	A novel electrospun ZnO nanofibers biosensor fabrication. Sensors and Actuators B: Chemical, 2011, 160, 1413-1418.	7.8	41
9	Extended-gate field-effect transistor (EG-FET) with molecularly imprinted polymer (MIP) film for selective inosine determination. Biosensors and Bioelectronics, 2015, 74, 526-533.	10.1	39
10	Magnetophotoluminescence study of intershell exchange interaction in CdTe/ZnTe quantum dots. Physical Review B, 2011, 84, .	3.2	36
11	Donor gettering in GaAs by rareâ€earth elements. Applied Physics Letters, 1988, 53, 761-763.	3.3	34
12	Magnetic Fe doped ZnO nanofibers obtained by electrospinning. Journal of Sol-Gel Science and Technology, 2012, 61, 494-500.	2.4	34
13	Facile synthesis of core/shell ZnO/ZnS nanofibers by electrospinning and gas-phase sulfidation for biosensor applications. Physical Chemistry Chemical Physics, 2015, 17, 24029-24037.	2.8	33
14	Upconverting/magnetic: Gd₂O₃:(Er³⁺,Yb³⁺,Zn²⁺) nanoparticles for biological applications: effect of Zn²⁺ doping. RSC Advances, 2015, 5, 78361-78373.	3.6	33
15	Resonant spectroscopy of II-VI self-assembled quantum dots: Excited states and excitonâ€“longitudinal optical phonon coupling. Physical Review B, 2004, 70, .	3.2	30
16	Synthesis of ZnAl₂O₄:(Er³⁺,Yb³⁺) spinel-type nanocrystalline upconverting luminescent marker in HeLa carcinoma cells, using a combustion aerosol method route. RSC Advances, 2014, 4, 56596-56604.	3.6	29
17	Transport of NaYF₄:Er³⁺, Yb³⁺up-converting nanoparticles into HeLa cells. Nanotechnology, 2013, 24, 235702.	2.6	28
18	Upconversion fluorescence imaging of HeLa cells using ROS generating SiO₂-coated lanthanide-doped NaYF₄ nanoconstructs. RSC Advances, 2017, 7, 30262-30273.	3.6	27

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19	Exciton Spectroscopy of Single CdTe and CdMnTe Quantum Dots. Physica Status Solidi (B): Basic Research, 2002, 229, 493-496.	1.5	23
20	The growth kinetics of colloidal ZnO nanoparticles in alcohols. Journal of Sol-Gel Science and Technology, 2012, 61, 197-205.	2.4	20
21	Magnetic field-induced spin reorientation in gadolinium surface layer of Gd/Fe multilayers. Journal of Magnetism and Magnetic Materials, 1998, 186, 139-153.	2.3	19
22	Exciton spin relaxation in quasiresonantly excitedCdTeâˆ•ZnTeself-assembled quantum dots. Physical Review B, 2004, 70, .	3.2	19
23	Mammalian cell defence mechanisms against the cytotoxicity of NaYF₄:(Er,Yb,Gd) nanoparticles. Nanoscale, 2017, 9, 14259-14271.	5.6	18
24	Stark spectroscopy and radiative lifetimes in single self-assembled CdTe quantum dots. Physical Review B, 2011, 83, .	3.2	17
25	Application of in situ surface scraping for extracting bulk component of XPS signal â€“ example of LiNbO3 and GaSb. Journal of Alloys and Compounds, 1999, 286, 162-166.	5.5	16
26	Light- and environment-sensitive electrospun ZnO nanofibers. RSC Advances, 2013, 3, 5656.	3.6	16
27	Single-step synthesis of Er³⁺and Yb³⁺ions doped molybdate/Gd₂O₃coreâ€“shell nanoparticles for biomedical imaging. Nanotechnology, 2018, 29, 025702.	2.6	16
28	Optical study of electron-electron exchange interaction in CdTe/ZnTe quantum dots. Physical Review B, 2013, 87, .	3.2	15
29	Ga1âˆ’xAlxAs purification during its liquid phase epitaxial growth in the presence of Yb. Applied Physics Letters, 1989, 54, 700-702.	3.3	14
30	2D and 1D electron transport in hybrid ferromagnetâ€“semiconductor microstructures. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 10, 91-96.	2.7	14
31	FMR and SMFMR investigation of epitaxial Fe/GaAs(001) thin films with Si and Ge overlayer. Journal of Magnetism and Magnetic Materials, 2003, 260, 386-392.	2.3	13
32	Study of Fe/Si multilayers by photoemission spectroscopy. Journal of Alloys and Compounds, 2004, 362, 202-205.	5.5	13
33	Influence of exciton spin relaxation on the photoluminescence spectra of semimagnetic quantum dots. Physical Review B, 2013, 87, .	3.2	13
34	The ROS-generating photosensitizer-free NaYF₄:Yb,Tm@SiO₂ upconverting nanoparticles for photodynamic therapy application. Nanotechnology, 2021, 32, 475101.	2.6	13
35	Photoluminescence and Thermoluminescence of the Oxygen-Deficient YAG, YAP, and YAM Phosphors. Acta Physica Polonica A, 2018, 133, 977-980.	0.5	11
36	XPS analysis of surface compositional changes in InSb1âˆ’xBix (111) due to low-energy Ar+ ion bombardment. Applied Surface Science, 2000, 153, 193-199.	6.1	10

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37	Magnetic anisotropy and magnetoelastic constants of ultrathin Fe/GaAs(001) films sputtered in hydrogen atmosphere. Journal of Magnetism and Magnetic Materials, 2004, 283, 28-33.	2.3	10
38	Tuning the inter-shell splitting in self-assembled CdTe quantum dots. Applied Physics Letters, 2011, 99, .	3.3	10
39	Thermoluminescent properties of Mn-doped YAP synthesized by the solution combustion method. Optical Materials, 2014, 37, 125-131.	3.6	10
40	The synthesis, characterization and ZnS surface passivation of polycrystalline ZnO films obtained by the spin-coating method. Journal of Alloys and Compounds, 2017, 695, 1196-1204.	5.5	10
41	Structural, optical and magnetic properties of Y_{3â"0.02â"x}Er_{0.02}Yb _x Al₅O₁₂ (0Â<ÂxÂ<Â0.20) nanocrystals: effect of Yb content. Nanotechnology, 2020, 31, 225711.	2.6	10
42	Inelastic cross-sections and natural lifetimes for the 62D3/2, 5/2 and 82S1/2 states of Rb. European Physical Journal D, 2000, 8, 49-58.	1.3	9
43	Microluminescence from a diluted magnetic semiconductor quantum well in a proximity of an iron micromagnet. Solid State Communications, 2001, 120, 35-39.	1.9	9
44	Conductivity switching effect in Cd1â€"xZnxTe films. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1197-1200.	0.8	9
45	Quantum nanostructures of paraelectric PbTe. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 35, 332-337.	2.7	9
46	Luminescence of colloidal ZnO nanoparticles synthesized in alcohols and biological application of ZnO passivated by MgO. Journal of Physics Condensed Matter, 2013, 25, 194104.	1.8	9
47	Electrical Conduction of a Single Electrospun <scp><scp>ZnO</scp></scp> Nanofiber. Journal of the American Ceramic Society, 2014, 97, 1157-1163.	3.8	9
48	Optically detected impact-ionization-related chaotic oscillations inGa0.47In0.53As. Physical Review B, 1991, 44, 8357-8360.	3.2	8
49	Magnetic-resonance studies of tellurium-dopedAlxGa1â"xAs. Physical Review B, 1994, 50, 2645-2648.	3.2	7
50	Thickness dependence of magnetic anisotropy and magnetoelastic constants in epitaxial Fe/GaAs (001) thin films. European Physical Journal D, 2002, 52, A169-A172.	0.4	7
51	Synthesis and magnetooptic characterization of Cu-doped ZnO/MgO and ZnO/oleic acid core/shell nanoparticles. RSC Advances, 2016, 6, 44820-44825.	3.6	7
52	Devitrification of thin film Cuâ€"Zr metallic glass via ultrashort pulsed laser annealing. Journal of Alloys and Compounds, 2021, 887, 161437.	5.5	7
53	Influence of Configuration Mixing on Energies and Recombination Dynamics of Excitonic States in CdTe/ZnTe Quantum Dots. Acta Physica Polonica A, 2011, 119, 615-617.	0.5	7
54	Formation of noncollinear spin configurations during magnetization reversal in multilayered Fe/Si films. Journal of Magnetism and Magnetic Materials, 2000, 213, 19-24.	2.3	6

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55	Orientation and layer thickness dependence on the longitudinal magnetization and transverse magnetization hysteresis loops of sputtered multilayer Fe/Si and Fe/Ge thin films. Journal of Physics Condensed Matter, 2004, 16, 4121-4129.	1.8	6
56	Magnetic stripe domains in Fe/Feâ€“N multilayers. Journal of Alloys and Compounds, 2006, 423, 172-175.	5.5	6
57	Technology of ZnO nanofibers based devices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1299-1303.	3.5	6
58	Magnetostriction of Fe/Gd multilayers. Journal of Magnetism and Magnetic Materials, 1995, 139, 157-161.	2.3	6
59	Thickness dependence of cubic anisotropy constant in sputtered Fe films on GaAs substrates. Physica B: Condensed Matter, 2000, 284-288, 1237-1238.	2.7	5
60	Magnetoresistance measurements on Fe/Si and Fe/Ge multilayer thin films. Journal of Magnetism and Magnetic Materials, 2005, 286, 91-94.	2.3	5
61	Study of crystalline thin films and nanofibers by means of the laserâ€“plasma EUV-source based microscopy. Radiation Physics and Chemistry, 2013, 93, 54-58.	2.8	5
62	Novel ZnO/MgO/Fe2O3composite optomagnetic nanoparticles. Journal of Physics Condensed Matter, 2013, 25, 194105.	1.8	5
63	Synthesis and characterization of Gd₂O₃: Er³⁺, Yb³⁺ doped with Mg²⁺, Li⁺ ionsâ€”effect on the photoluminescence and biological applications. Nanotechnology, 2021, 32, 245705.	2.6	5
64	Photoluminescence Properties of ZnO and ZnCdO Nanowires. Acta Physica Polonica A, 2007, 112, 357-362.	0.5	5
65	Photoluminescence Properties of ZnO Nanowires Grown on Ni Substrate. Acta Physica Polonica A, 2008, 114, 1451-1456.	0.5	5
66	FMR Investigation of In-Plane Magnetic Anisotropy and Interlayer Coupling in Fe/Si/Fe Trilayers. Materials Science Forum, 2001, 373-376, 141-144.	0.3	4
67	Î¼-Luminescence study of hybrid ferromagnet/diluted magnetic semiconductor quantum structures. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 560-563.	2.7	4
68	Interlayer Magnetic Coupling for Fe/Si Multilayers. Journal of Superconductivity and Novel Magnetism, 2003, 16, 205-208.	0.5	4
69	Unidirectional transmission of electrons in a magnetic field gradient. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 451-455.	2.7	4
70	0.7 anomaly and magnetotransport of disordered quantum wires. Europhysics Letters, 2008, 82, 27003.	2.0	4
71	<title>Liquid-phase epitaxial growth and characterization of In(Sb,Bi)</title>. , 1999, , .		3
72	Excitation transfer between the rubidium52Dfine-structure levels in collisions with ground-state rubidium atoms: Experiment and theory. Physical Review A, 2000, 62, .	2.5	3

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73	Magnetooptical studies of the Hâ€“T phase diagram of an Fe/Si multilayered film. Low Temperature Physics, 2001, 27, 655-661.	0.6	3
74	Noncollinear magnetic structures in an Fe/Si/Fe film with a ferromagnetic interlayer exchange interaction. Low Temperature Physics, 2002, 28, 639-641.	0.6	3
75	Structural studies of magnetic Fe doped ZnO nanofibers. Radiation Physics and Chemistry, 2013, 93, 21-24.	2.8	3
76	Morphology and Selected Properties of Core/Shell ZnTe-Based Nanowire Structures Containing ZnO. Acta Physica Polonica A, 2011, 119, 612-614.	0.5	3
77	Optical studies of spin relaxation in CdTe self-assembled quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 937-940.	0.8	2
78	Quantum effects in linear and nonlinear transport ofT-shaped ballistic junction patterned fromGaAs/AlxGa1â^'xAsheterostructures. Physical Review B, 2010, 81, .	3.2	2
79	Stability of ZnO nanofibers in processing liquid agents. Materials Science-Poland, 2013, 31, 312-317.	1.0	2
80	Stark spectroscopy of CdTe and CdMnTe quantum dots embedded in n-i-p diodes. Journal of Applied Physics, 2014, 115, 203512.	2.5	2
81	Engineering the hole confinement for CdTe-based quantum dot molecules. Journal of Applied Physics, 2015, 117, .	2.5	2
82	Fluorescence resonance energy transfer between ZnO/MgO/carboxymethyl-Î²-cyclodextrin and Nile Red in HeLa cells â€“ biosensing applications. RSC Advances, 2015, 5, 1323-1330.	3.6	2
83	FMR and SMFMR study of Fe/Si multilayers. European Physical Journal Special Topics, 1998, 08, Pr2-249-Pr2-252.	0.2	2
84	Mechanical and Electrical Properties of ZnO-Nanowire/Si-Substrate Junctions Studied by Scanning Probe Microscopy. Acta Physica Polonica A, 2007, 112, 255-260.	0.5	2
85	Physical Properties of ZnCoO Tetrapods and Nanofibers. Acta Physica Polonica A, 2009, 116, 868-870.	0.5	2
86	Spectroscopy of Indirect Excitons in Vertically Stacked CdTe Quantum Dot Structures. Acta Physica Polonica A, 2011, 120, 856-858.	0.5	2
87	Native Defects in Gallium Arsenide Grown by Synthesis, Solute Diffusion Method. Acta Physica Polonica A, 1991, 80, 349-352.	0.5	2
88	Observation of Two-Dimensional Electron Gas in LPE-Grown GaInAs-InP Heterostructures. Acta Physica Polonica A, 1991, 80, 449-452.	0.5	2
89	Optical detection of chaotic oscillations owing to impact ionization of donors by hot carriers in GaInAs. Semiconductor Science and Technology, 1992, 7, B483-B485.	2.0	1
90	Low temperature enhancement of the magnetic anisotropy in Fe/Si multilayers. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 83-84.	2.3	1

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91	Spontaneous and field-induced magnetic configurations in a Fe/Si/Fe trilayer with ferromagnetic interlayer exchange. Journal of Physics Condensed Matter, 2002, 14, 8969-8977.	1.8	1
92	Temperature dependences of surface magnetoelastic constants of ultrathin Fe/GaAs (001) films. Low Temperature Physics, 2012, 38, 839-842.	0.6	1
93	Surface potential measurements of a single ZnO nanofiber. , 2012, , .		1
94	Surface defect states in MBE-grown CdTe layers. , 2014, , .		1
95	Imaging in Nanoscale Using Laser-Plasma Sources of Extreme Ultraviolet (EUV). Springer Proceedings in Physics, 2014, , 269-276.	0.2	1
96	Thermal index guiding in (AlGa)As proton-isolated lasers: its origins and reduction by post-implantation heat treatment. IEE Proceedings, Part J: Optoelectronics, 1991, 138, 13.	0.4	1
97	Magnetoplasmons in a High Electron Mobility GaAs/AlGaAs Heterostructure. Acta Physica Polonica A, 2012, 122, 1096-1098.	0.5	1
98	Noncollinear spin configuration induced by a magnetic field in the surface gadolinium layer of multilayered Gd/Fe films. Low Temperature Physics, 1997, 23, 346-348.	0.6	0
99	Fine-structure mixing collisions of Rb(52D) excited in a two-photon transition using external-cavity cw diode laser. , 1999, 3571, 200.		0
100	Magneto-Optical Investigation of H-T Phase Diagram in Fe/Si Multilayers. Materials Science Forum, 2001, 373-376, 489-492.	0.3	0
101	Resonant photoluminescence and excitation spectroscopy of CdSe/ZnSe and CdTe/ZnTe self-assembled quantum dots. Materials Research Society Symposia Proceedings, 2002, 737, 248.	0.1	0
102	Publisher's Note: Exciton spin relaxation in quasiresonantly excited CdTe/ZnTe self-assembled quantum dots [Phys. Rev. B70, 245312 (2004)]. Physical Review B, 2004, 70, .	3.2	0
103	Morphology Of CdTe/ZnTe Self-Assembled Quantum Dots Studied By Excitation Spectroscopy. AIP Conference Proceedings, 2005, , .	0.4	0
104	Double-frequency external cavity laser with a singular optical semiconductor amplifier. Opto-electronics Review, 2009, 17, .	2.4	0
105	Tunable Resonant Detection of sub-THz Radiation with GaAsâ^•AlGaAs High Electron Mobility Transistors at Magnetic Fields. , 2011, , .		0
106	Synthesis and properties of nanocoral ZnO structures. Materials Research Society Symposia Proceedings, 2013, 1552, 113-118.	0.1	0
107	Optical signatures of spin-dependent coupling in semimagnetic quantum dot molecules. Physical Review B, 2015, 92, .	3.2	0
108	Photoluminescence study of the increased hole confinement in CdTe quantum dots (Presentation) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.8	0

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109	Preliminary Measurements of Magnetic Nanoparticles as Potential Biomarkers for Impedance Flow Cytometry. , 2018, , .		0
110	Copper Doping of Low-Dimensional Se-Based Semiconductor Structures Grown by Molecular Beam Epitaxy. Journal of Physical Chemistry C, 2019, 123, 19938-19944.	3.1	0
111	Influence of copper dopants on the photoluminescence of single CdTe quantum dots. Journal of Applied Physics, 2020, 127, 024306.	2.5	0
112	Atomic Force Microscopy Study of a Voltage Effect on CdZnTe Crystal Dimensions. Acta Physica Polonica A, 2008, 114, 1041-1047.	0.5	0
113	Magnetic Force Microscopy Study of Zn1-xCoxO Nanowires Grown by Rapid Thermal Evaporation. Acta Physica Polonica A, 2009, 116, 865-867.	0.5	0
114	Impact Ionization Driven Chaotic Photoluminescence Oscillations in Ga0.47In0.53As. Acta Physica Polonica A, 1991, 80, 271-274.	0.5	0
115	Optically Detected Magnetic Resonance Studies of Te-Related Shallow Donors in AlxGa1-xAs. Acta Physica Polonica A, 1991, 80, 341-344.	0.5	0
116	Photo-ESR Study of the DX to Shallow Donor Conversion in Te Doped Al_xGa_{1-x}As. Acta Physica Polonica A, 1993, 84, 757-760.	0.5	0