

Daniela Gogova

List of Publications by Year in descending order

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115
papers

3,502
citations

94269

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all docs

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docs citations

119
times ranked

2785
citing authors

#	ARTICLE	IF	CITATIONS
1	Homoepitaxial growth of In_2O_3 layers by metal-organic vapor phase epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 27-33.	0.8	170
2	MoSi_2N_4 single-layer: a novel two-dimensional material with outstanding mechanical, thermal, electronic and optical properties. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 155303.	1.3	160
3	Anisotropy, phonon modes, and free charge carrier parameters in monoclinic In_2O_3 -gallium oxide single crystals. <i>Physical Review B</i> , 2016, 93, .	1.1	147
4	Electrical compensation by Ga vacancies in Ga_2O_3 thin films. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	142
5	Structural properties of Si-doped In_2O_3 layers grown by MOVPE. <i>Journal of Crystal Growth</i> , 2014, 401, 665-669.	0.7	133
6	Homo- and heteroepitaxial growth of Sn-doped In_2O_3 layers by MOVPE. <i>CrystEngComm</i> , 2015, 17, 6744-6752.	1.3	113
7	Epitaxial stabilization of pseudomorphic In_2O_3 on sapphire (0001). <i>Applied Physics Express</i> , 2015, 8, 011101.	1.1	104
8	Tunable electronic and magnetic properties of MoSi_2N_4 monolayer via vacancy defects, atomic adsorption and atomic doping. <i>Applied Surface Science</i> , 2021, 559, 149862.	3.1	81
9	First-principles investigation of nonmetal doped single-layer BiOBr as a potential photocatalyst with a low recombination rate. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 15354-15364.	1.3	74
10	Compensation and persistent photocapacitance in homoepitaxial Sn-doped In_2O_3 . <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	73
11	Analysis of the Formation Conditions for Large Area Epitaxial Graphene on SiC Substrates. <i>Materials Science Forum</i> , 0, 645-648, 565-568.	0.3	62
12	Atomic structure, electronic states, and optical properties of epitaxially grown In_2O_3 layers. <i>Superlattices and Microstructures</i> , 2018, 120, 90-100.	1.4	60
13	Growth of thick GaN layers with hydride vapour phase epitaxy. <i>Journal of Crystal Growth</i> , 2005, 281, 17-31.	0.7	55
14	Ab-initio-driven prediction of puckered penta-like PdPSeX (X O, S, Te) Janus monolayers: Study on the electronic, optical, mechanical and photocatalytic properties. <i>Applied Surface Science</i> , 2022, 582, 152356.	3.1	55
15	Strain-free bulk-like GaN grown by hydride-vapor-phase-epitaxy on two-step epitaxial lateral overgrown GaN template. <i>Journal of Applied Physics</i> , 2004, 96, 799-806.	1.1	52
16	Surface modification of titanium carbide MXene monolayers (Ti_2C and Ti_3C_2) by H_2O_2 and H_2SO_4 . <i>Chemical Physics</i> , 2021, 23, 15319-15328.	1.3	51
17	Two-dimensional carbon nitride C_6N nanosheet with egg-comb-like structure and electronic properties of a semimetal. <i>Nanotechnology</i> , 2021, 32, 215702.	1.3	50
18	Adsorption of habitat and industry-relevant molecules on the MoSi_2N_4 monolayer. <i>Applied Surface Science</i> , 2021, 564, 150326.	3.1	50

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19	Comparative study of gasochromic and electrochromic effect in thermally evaporated tungsten oxide thin films. <i>Thin Solid Films</i> , 2009, 517, 3326-3331.	0.8	49
20	Effect of electric field and vertical strain on the electro-optical properties of the MoSi ₂ N ₄ bilayer: A first-principles calculation. <i>Journal of Applied Physics</i> , 2021, 129, .	1.1	48
21	Structural and optical investigation of non-polar (1-100) GaN grown by the ammonothermal method. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	46
22	Structural and Optical Properties of CVD Thin Tungsten Oxide Films. <i>Physica Status Solidi A</i> , 1999, 176, 969-984.	1.7	45
23	High-Quality 2" Bulk-Like Free-Standing GaN Grown by Hydride Vapour Phase Epitaxy on a Si-doped Metal Organic Vapour Phase Epitaxial GaN Template with an Ultra Low Dislocation Density. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 1181-1185.	0.8	45
24	The influence of substrate morphology on thickness uniformity and unintentional doping of epitaxial graphene on SiC. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	45
25	Ion implantation in $\hat{2}$ -Ga ₂ O ₃ : Physics and technology. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021, 39, .	0.9	45
26	Biphenylene monolayer as a two-dimensional nonbenzenoid carbon allotrope: a first-principles study. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 015001.	0.7	45
27	Reactive magnetron sputtering of Nb-doped TiO ₂ films: Relationships between structure, composition and electrical properties. <i>Thin Solid Films</i> , 2016, 605, 44-52.	0.8	44
28	Two-dimensional FeTe ₂ and predicted Janus FeXS (X: Te and Se) monolayers with intrinsic half-metallic character: tunable electronic and magnetic properties via strain and electric field. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 24336-24343.	1.3	44
29	Nearly stress-free substrates for GaN homoepitaxy. <i>Journal of Crystal Growth</i> , 2006, 293, 462-468.	0.7	43
30	Fast growth of high quality GaN. <i>Physica Status Solidi A</i> , 2003, 200, 13-17.	1.7	42
31	Analogy for the maximum obtainable colouration between electrochromic, gasochromic, and electrocolouration in DC-sputtered thin WO ₃ films. <i>Thin Solid Films</i> , 2005, 476, 185-189.	0.8	42
32	Prediction of two-dimensional bismuth-based chalcogenides Bi ₂ X ₃ (X = S, Se). <i>Journal of Applied Physics</i> , 2021, 54, 395103.	1.3	42
33	Aligned AlN nanowires by self-organized vapor-solid growth. <i>Nanotechnology</i> , 2009, 20, 495304.	1.3	41
34	Electrochromic behavior in CVD grown tungsten oxide films. <i>Journal of Crystal Growth</i> , 1999, 198-199, 1230-1234.	0.7	40
35	Effect of indium as a surfactant in (Ga _{1-x} In _x) ₂ O ₃ epitaxial growth on $\hat{2}$ -Ga ₂ O ₃ by metal organic vapour phase epitaxy. <i>Semiconductor Science and Technology</i> , 2015, 30, 024013.	1.0	40
36	Structural and optical properties of arsenic sulfide films synthesized by a novel PECVD-based approach. <i>Superlattices and Microstructures</i> , 2017, 111, 1104-1112.	1.4	40

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37	Investigation of the composition-structure-property relationship of As _x Te _{100-x} films prepared by plasma deposition. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 191, 211-216.	2.0	40
38	Spectroscopic characterization of CVD-molybdenum oxide films. <i>Electrochimica Acta</i> , 2001, 46, 2215-2219.	2.6	39
39	Optical and Structural Characteristics of Virtually Unstrained Bulk-Like GaN. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 1264-1268.	0.8	37
40	A new approach to free-standing GaN using \hat{I}^2 -Ga ₂ O ₃ as a substrate. <i>CrystEngComm</i> , 2012, 14, 8536.	1.3	37
41	Two-dimensional buckled tetragonal cadmium chalcogenides including CdS, CdSe, and CdTe monolayers as photo-catalysts for water splitting. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 12226-12232.	1.3	35
42	On the structure, stress and optical properties of CVD tungsten oxide films. <i>Materials Research Bulletin</i> , 2005, 40, 333-340.	2.7	33
43	Contribution of dislocations to carrier recombination and transport in highly excited ELO and HVPE GaN layers. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 1426-1430.	0.7	32
44	A study of the effect of KClO ₃ addition on the AC susceptibility and microstructure of high-temperature (T _{conset} at 105 K) YBCO ceramic superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1998, 308, 175-184.	0.6	31
45	Investigation of the structure of tungsten oxide films obtained by chemical vapor deposition. <i>EPJ Applied Physics</i> , 2000, 11, 167-174.	0.3	31
46	All-optical characterization of carrier lifetimes and diffusion lengths in MOCVD-, ELO-, and HVPE-grown GaN. <i>Journal of Crystal Growth</i> , 2007, 300, 223-227.	0.7	31
47	Optical emission of two-dimensional arsenic sulfide prepared by plasma. <i>Superlattices and Microstructures</i> , 2018, 114, 305-313.	1.4	31
48	Heteroepitaxy of Ga ₂ (1-x)In _{2x} O ₃ layers by MOVPE with two different oxygen sources. <i>Crystal Research and Technology</i> , 2014, 49, 552-557.	0.6	30
49	Point Defects in a Two-Dimensional ZnSnN ₂ Nanosheet: A First-Principles Study on the Electronic and Magnetic Properties. <i>Journal of Physical Chemistry C</i> , 2021, 125, 13067-13075.	1.5	26
50	Study of the surface roughness of CVD-tungsten oxide thin films. <i>Applied Surface Science</i> , 2003, 218, 163-169.	3.1	25
51	A new method for synthesis of As-Te chalcogenide films. <i>Superlattices and Microstructures</i> , 2017, 111, 173-180.	1.4	23
52	A novel two-dimensional boron-carbon-nitride (BCN) monolayer: A first-principles insight. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	23
53	Van der Waals heterostructure of graphene and germanane: tuning the ohmic contact by electrostatic gating and mechanical strain. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 21196-21206.	1.3	21
54	Electronic and optical properties of two-dimensional heterostructures and heterojunctions between doped-graphene and C- and N-containing materials. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 4865-4873.	1.3	21

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55	Semiconducting Chalcogenide Alloys Based on the (Ge, Sn, Pb) (S, Se, Te) Formula with Outstanding Properties: A First-Principles Calculation Study. ACS Omega, 2021, 6, 9433-9441.	1.6	20
56	Impact of Cr ₂ O ₃ additives on the gas-sensitive properties of $\hat{\Gamma}^2$ -Ga ₂ O ₃ thin films to oxygen, hydrogen, carbon monoxide, and toluene vapors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	20
57	Point defects in two-dimensional BeO monolayer: a first-principles study on electronic and magnetic properties. Physical Chemistry Chemical Physics, 2021, 23, 24301-24312.	1.3	19
58	Investigation of vacancy defects and substitutional doping in AlSb monolayer with double layer honeycomb structure: a first-principles calculation. Journal of Physics Condensed Matter, 2022, 34, 065701.	0.7	18
59	Investigation of the structural and optical properties of free-standing GaN grown by HVPE. Journal Physics D: Applied Physics, 2005, 38, 2332-2337.	1.3	17
60	Surface functionalization of the honeycomb structure of zinc antimonide (ZnSb) monolayer: A first-Principles study. Surface Science, 2021, 707, 121796.	0.8	17
61	Epitaxial growth of $\hat{\Gamma}^2$ -Ga ₂ O ₃ by hot-wall MOCVD. AIP Advances, 2022, 12, .	0.6	17
62	Optical properties of thin CVD-tungsten oxide films by spectroscopic ellipsometry. Journal of Crystal Growth, 1999, 198-199, 1235-1239.	0.7	16
63	Optical and structural studies of high-quality bulk-like GaN grown by HVPE on a MOVPE AlN buffer layer. Semiconductor Science and Technology, 2006, 21, 702-708.	1.0	16
64	Infrared and Raman spectroscopy study of As S chalcogenide films prepared by plasma-enhanced chemical vapor deposition. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 193, 258-263.	2.0	16
65	Vertical two-dimensional layered conjugated porous organic network structures of poly-benzimidazobenzophenanthroline (BBL): A first-principles study. Applied Physics Letters, 2020, 117, .	1.5	16
66	Large-area free-standing GaN substrate grown by hydride vapor phase epitaxy on epitaxial lateral overgrown GaN template. Physica B: Condensed Matter, 2006, 371, 133-139.	1.3	15
67	Synthesis of gallium oxide via interaction of gallium with iodide pentoxide in plasma. Optical and Quantum Electronics, 2020, 52, 1.	1.5	15
68	Metal-doped KNbO ₃ for visible light photocatalytic water splitting: A first principles investigation. Applied Physics Letters, 2021, 119, .	1.5	15
69	Ion-beam modification of metastable gallium oxide polymorphs. Materials Letters, 2021, 302, 130346.	1.3	14
70	Electrical Properties of Bulk, Non-Polar, Semi-Insulating M-GaN Grown by the Ammonothermal Method. ECS Journal of Solid State Science and Technology, 2018, 7, P260-P265.	0.9	13
71	High electron mobility single-crystalline ZnSn ₂ on ZnO (0001) substrates. CrystEngComm, 2020, 22, 6268-6274.	1.3	13
72	Micro-Raman scattering profiling studies on HVPE-grown free-standing GaN. Physica Status Solidi A, 2004, 201, 2773-2776.	1.7	12

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73	PVT growth of GaN bulk crystals. <i>Journal of Crystal Growth</i> , 2011, 318, 406-410.	0.7	12
74	Bulk In ₂ O ₃ crystals grown by chemical vapour transport: a combination of XPS and DFT studies. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 18753-18758.	1.1	12
75	CVD W ₂ C and WC _x N _y diffusion barrier coatings on WC/Co metalceramics. <i>Materials Letters</i> , 1998, 35, 351-356.	1.3	10
76	Study of thin chemical vapour deposited tungsten oxide films by positron annihilation spectroscopy. <i>Thin Solid Films</i> , 1999, 347, 302-306.	0.8	10
77	Growth of GaN crystals from chlorine-free gas phase. <i>Journal of Crystal Growth</i> , 2008, 310, 916-919.	0.7	10
78	A new approach to grow Cd-doped GaN thick epitaxial layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2120-2122.	0.8	10
79	ZnSn ₂ in Real Space and k-space: Lattice Constants, Dislocation Density, and Optical Band Gap. <i>Advanced Optical Materials</i> , 2021, 9, 2100015.	3.6	10
80	Highly homogeneous bulk-like 2 nd GaN grown by HVPE on MOCVD GaN template. <i>Journal of Crystal Growth</i> , 2005, 275, e387-e393.	0.7	9
81	Pseudohalide vapour growth of thick GaN layers. <i>Journal of Crystal Growth</i> , 2010, 312, 750-755.	0.7	9
82	The role of carbon in transport processes during PVT growth of bulk GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 1484-1487.	0.8	8
83	Reduction of the dislocation density in HVPE-grown GaN epi-layers by an in situ Si _x treatment. <i>Journal of Crystal Growth</i> , 2010, 312, 595-600.	0.7	8
84	InN nanopillars grown from In-rich conditions by migration enhanced afterglow technique. <i>Materials Letters</i> , 2013, 106, 155-157.	1.3	8
85	A novel method for synthesis of arsenic sulfide films employing conversion of arsenic monosulfide in a plasma discharge. <i>Superlattices and Microstructures</i> , 2018, 120, 264-271.	1.4	8
86	Some new insights into the impact of annealing on single stacking faults in 4H-SiC. <i>Superlattices and Microstructures</i> , 2018, 120, 7-14.	1.4	8
87	Deposition and characterization of CVD MoO ₃ thin films. <i>European Physical Journal Special Topics</i> , 1999, 09, Pr8-453-Pr8-459.	0.2	8
88	APCVD - In-Situ Growing and Investigation of Electrochromic WO ₃ Films. <i>Materials Research Society Symposia Proceedings</i> , 1995, 415, 155.	0.1	7
89	Application of picosecond four-wave mixing and photoluminescence techniques for investigation of carrier dynamics in bulk crystals and heterostructures of GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 1006-1009.	0.8	7
90	Positron annihilation study of HVPE grown thick GaN layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2005, 202, 713-717.	0.8	7

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91	Initial results for epitaxial growth of InN on gallium oxide and improved Migration-Enhanced Afterglow Epitaxy growth on gallium nitride. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2014, 32, .	0.6	7
92	Characterization of crack-free relaxed GaN grown on 2 ^{â€³} sapphire. Journal of Applied Physics, 2005, 98, 073525.	1.1	6
93	Novel two-dimensional ZnO ₂ , CdO ₂ and HgO ₂ monolayers: a first-principles-based prediction. New Journal of Chemistry, 2021, 45, 9368-9374.	1.4	6
94	A novel plasma-based method for synthesis of As-Se-Te films: Impact of plasma parameters on the structure, composition, and optical properties. Superlattices and Microstructures, 2019, 128, 334-341.	1.4	6
95	High frequency electromagnetic field processing of amorphous silicon layers containing nanoclusters produced by implantation of metal ions in Si(100) matrix. Nuclear Instruments & Methods in Physics Research B, 2005, 229, 65-72.	0.6	5
96	Gas-Phase Reactions Regarding GaN Crystal Growth in a Carbon-Based Transport System: A Quantum Chemical Study. Crystal Growth and Design, 2013, 13, 1445-1457.	1.4	5
97	Some insights into the mechanism of photoluminescence of As-S-based films synthesized by PECVD. Journal of Non-Crystalline Solids, 2019, 513, 120-124.	1.5	5
98	Theoretical study on electronic, optical, magnetic and photocatalytic properties of codoped SrTiO ₃ for green energy application. , 2022, 168, 207302.		5
99	Investigations of a buffer layer grown on a CdTe surface. Journal of Physics Condensed Matter, 1999, 11, 10003-10006.	0.7	4
100	Formation of MoSi ₂ by rapid thermal annealing in vacuum of CVD â€œ Mo films on silicon substrate. Vacuum, 2000, 58, 502-508.	1.6	4
101	Characterization of High-Quality Free-Standing GaN Grown by HVPE. Physica Scripta, 2004, T114, 18-21.	1.2	4
102	HVPE GaN substrates: growth and characterization. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1756-1759.	0.8	4
103	The role of NH ₃ and hydrocarbon mixtures in GaN pseudo-halide CVD: a quantum chemical study. Journal of Molecular Modeling, 2014, 20, 2473.	0.8	4
104	Investigations of the growth conditions for GaN-bulk crystals grown by the sublimation technique. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2219-2222.	0.8	3
105	Growth of single crystalline GaN from chlorine-free gas phase. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1543-1546.	0.8	3
106	Chlorine-free plasma-based vapour growth of GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 440-444.	0.8	3
107	Surface roughness evolution in a solid-on-solid model of epitaxial growth. Applied Physics A: Materials Science and Processing, 2015, 118, 337-343.	1.1	3
108	Free-standing HVPE-GaN Layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1985-1988.	0.8	2

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109	Microscopic lateral overgrowth by physical vapour transport of GaN on self-organized diamond-like carbon masks. <i>Crystal Research and Technology</i> , 2009, 44, 1078-1082.	0.6	2
110	Study of the surfaces of CVD-WO ₃ films, by atomic force microscopy and spectroscopic ellipsometry. <i>Journal of Materials Science: Materials in Electronics</i> , 2003, 14, 769-770.	1.1	1
111	Free Standing AlN Single Crystal Grown on Pre-Patterned and <i>In Situ</i> Patterned 4H-SiC Substrates. <i>Materials Science Forum</i> , 0, 645-648, 1187-1190.	0.3	1
112	Growth and structural, optical and electrical properties study of bulk GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 1048-1052.	0.8	1
113	A new plasma-based approach to hydrogen intercalation of graphene. <i>Superlattices and Microstructures</i> , 2021, 160, 107066.	1.4	1
114	Correction to Gas-Phase Reactions Regarding GaN Crystal Growth in a Carbon-Based Transport System: A Quantum Chemical Study. <i>Crystal Growth and Design</i> , 2013, 13, 5507-5507.	1.4	0
115	A Method for Deep Purification of Iodine for Semiconductor Applications. , 2019, , .		0