

# Jan Grym

## List of Publications by Year in descending order

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76  
papers

555  
citations

623188

14  
h-index

752256

20  
g-index

77  
all docs

77  
docs citations

77  
times ranked

588  
citing authors

#	ARTICLE	IF	CITATIONS
1	Growth and spatially resolved luminescence of low dimensional structures in sintered ZnO. <i>Nanotechnology</i> , 2005, 16, 931-935.	1.3	43
2	Luminescence properties of hydrothermally grown ZnO nanorods. <i>Superlattices and Microstructures</i> , 2016, 99, 214-220.	1.4	31
3	The improvement of UV photodetection based on polymer/ZnO nanorod heterojunctions. <i>Organic Electronics</i> , 2020, 77, 105545.	1.4	28
4	Graphite/ZnO nanorods junction for ultraviolet photodetectors. <i>Solid-State Electronics</i> , 2015, 105, 70-73.	0.8	27
5	Semimetal graphite/ZnO Schottky diodes and their use for hydrogen sensing. <i>Carbon</i> , 2012, 50, 3928-3933.	5.4	25
6	Electrical and optical properties of graphite/ZnO nanorods heterojunctions. <i>Carbon</i> , 2014, 77, 1011-1019.	5.4	24
7	Optical and electrical characterization of CuO/ZnO heterojunctions. <i>Thin Solid Films</i> , 2020, 693, 137656.	0.8	24
8	Temperature-dependent properties of semimetal graphite-ZnO Schottky diodes. <i>Applied Physics Letters</i> , 2012, 101, .	1.5	23
9	Room temperature hydrogen sensing with the graphite/ZnO nanorod junctions decorated with Pt nanoparticles. <i>Solid-State Electronics</i> , 2016, 116, 124-129.	0.8	20
10	ZnO nanorods-PANI heterojunction dielectric, electrochemical properties, and photodegradation study of organic pollutant under solar light. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 20893-20904.	3.8	18
11	Graphite/CdMnTe Schottky diodes and their electrical characteristics. <i>Semiconductor Science and Technology</i> , 2014, 29, 015006.	1.0	17
12	Hydrogen sensors based on electrophoretically deposited Pd nanoparticles onto InP. <i>Nanoscale Research Letters</i> , 2011, 6, 392.	3.1	15
13	Transport properties of metal-semiconductor junctions on n-type InP prepared by electrophoretic deposition of Pt nanoparticles. <i>Semiconductor Science and Technology</i> , 2014, 29, 045017.	1.0	15
14	PPV derivative/ZnO nanorods heterojunction: Fabrication, Characterization and Near-UV light sensor development. <i>Materials Research Bulletin</i> , 2018, 106, 28-34.	2.7	15
15	Influence of Crystallographic Orientation on Schottky Barrier Formation in Gallium Oxide. <i>Journal of Electronic Materials</i> , 2020, 49, 5133-5137.	1.0	14
16	Thermal stability study of semimetal graphite n-InP and n-GaN Schottky diodes. <i>Semiconductor Science and Technology</i> , 2013, 28, 055009.	1.0	13
17	New Insights towards High-Temperature Ethanol-Sensing Mechanism of ZnO-Based Chemiresistors. <i>Sensors</i> , 2020, 20, 5602.	2.1	13
18	Electrical and Optical Properties of Rectifying ZnO Homojunctions Fabricated by Wet Chemistry Methods. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700592.	0.8	12

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19	Insight into Nanoparticle Charging Mechanism in Nonpolar Solvents To Control the Formation of Pt Nanoparticle Monolayers by Electrophoretic Deposition. ACS Applied Materials & Interfaces, 2016, 8, 19680-19690.	4.0	10
20	Modeling of Solution Growth of ZnO Hexagonal Nanorod Arrays in Batch Reactors. Crystal Growth and Design, 2020, 20, 3347-3357.	1.4	10
21	Luminescence, up-conversion and temperature sensing in Er-doped TeO <sub>2</sub> -PbCl <sub>2</sub> -WO <sub>3</sub> glasses. Journal of Non-Crystalline Solids, 2021, 553, 120287.	1.5	10
22	Epitaxial growth on porous GaAs substrates. Comptes Rendus Chimie, 2013, 16, 59-64.	0.2	9
23	Misfit dislocation reduction in InGaAs epilayers grown on porous GaAs substrates. Applied Surface Science, 2014, 306, 89-93.	3.1	8
24	Hollow target for efficient generation of fast ions by ultrashort laser pulses. Physics of Plasmas, 2016, 23, .	0.7	8
25	Highly Textured Seed Layers for the Growth of Vertically Oriented ZnO Nanorods. Crystals, 2019, 9, 566.	1.0	7
26	Characterization of Graphite/ZnO Schottky Barriers Formed on Polar and Nonpolar ZnO Surfaces. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800734.	0.8	7
27	Electrical properties of nanoscale p-n heterojunctions formed between a single ZnO nanorod and GaN substrate. Materials Science in Semiconductor Processing, 2020, 107, 104808.	1.9	7
28	Highly Rectifying Heterojunctions Formed by Annealed ZnO Nanorods on GaN Substrates. Nanomaterials, 2020, 10, 508.	1.9	7
29	Preparation of p-type InP layers for detection of radiation. Journal of Crystal Growth, 2005, 275, e959-e963.	0.7	6
30	High sensitivity hydrogen sensors based on GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1661-1663.	0.8	5
31	Schottky barriers based on metal nanoparticles deposited on InP epitaxial layers. Semiconductor Science and Technology, 2013, 28, 045006.	1.0	5
32	Elastic constants of nanoporous III-V semiconductors. Journal Physics D: Applied Physics, 2015, 48, 245102.	1.3	5
33	Electrical Characterization of Graphite/InP Schottky Diodes by I <sup>2</sup> V and C <sup>2</sup> V Methods. Journal of Electronic Materials, 2018, 47, 4950-4954.	1.0	5
34	Influence of the Interaction Between Graphite and Polar Surfaces of ZnO on the Formation of Schottky Contact. Journal of Electronic Materials, 2018, 47, 5002-5006.	1.0	5
35	LPE growth of InP layers from rare-earth treated melts for radiation detector structures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 94-97.	1.7	4
36	Preparation of nanoporous GaAs substrates for epitaxial growth. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1531-1533.	0.8	4

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37	Graphite/SiC junctions and their electrical characteristics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017, 214, 1700143.	0.8	4
38	Seed Layers for the Growth of Oriented Vertical Arrays of ZnO Nanorods. <i>ECS Transactions</i> , 2018, 82, 39-44.	0.3	4
39	Influence of Surface Polarity on Optoelectronic Properties of PEDOT:PSS/ZnO Hybrid Heterojunctions. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2000612.	0.8	4
40	Synthesis of Cu-Ti thin film multilayers on silicon substrates. <i>Bulletin of Materials Science</i> , 2021, 44, 1.	0.8	4
41	Preparation of InP-based semiconductor materials with low density of defects: effect of Nd, Ho and Tb addition. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 91-92, 407-411.	1.7	3
42	Correlation of Pr, Dy, and Tb addition with physical properties of InP layers prepared by liquid phase epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 950-955.	0.8	3
43	Thermal conversion and epitaxial overgrowth of nanopores etched in InP and GaAs. <i>International Journal of Nanotechnology</i> , 2012, 9, 732.	0.1	3
44	Hydrogen sensing using reduced graphene oxide sheets supported by Pd nanoparticles. <i>Journal of Physics: Conference Series</i> , 2013, 450, 012020.	0.3	3
45	Multilayered Cu-Ti deposition on silicon substrates for chemiresistor applications. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2020, 195, 932-935.	0.8	3
46	Chemiresistors Based on Li-Doped Cu-TiO <sub>2</sub> Films. <i>Chemosensors</i> , 2021, 9, 246.	1.8	3
47	Temperature sensing down to 4 K with erbium-doped tellurite glasses. <i>Journal of Non-Crystalline Solids</i> , 2022, 575, 121183.	1.5	3
48	Room temperature particle detectors based on indium phosphide. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 612, 334-337.	0.7	2
49	Role of Rare-Earth Elements in the Technology of III-V Semiconductors Prepared by Liquid Phase Epitaxy. , 0, , .		2
50	ZnO-Based Gas Sensors Prepared by EPD and Hydrothermal Growth. <i>Key Engineering Materials</i> , 0, 654, 94-98.	0.4	2
51	Preparation and characterization of a poly (1, 4-phenylenevinylene) derivative-based hybrid thin film nanocomposites with enhanced performance. <i>Journal of Physics and Chemistry of Solids</i> , 2018, 116, 15-21.	1.9	2
52	Focused ion beam assisted prototyping of graphene/ZnO devices on Zn-polar and O-polar faces of ZnO bulk crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, 136, 115006.	1.3	2
53	On the nature of doping effect of methane in ZnO thin films deposited by RF-magnetron sputtering. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 6421.	1.1	2
54	Laser assisted electrochemical preparation of micro and nanopores in Ga <sub>x</sub> In <sub>1-x</sub> P. <i>Journal of Nanoparticle Research</i> , 2011, 13, 5873-5877.	0.8	1

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55	Particle detectors based on semiconducting InP epitaxial layers. Journal of Instrumentation, 2011, 6, C01072-C01072.	0.5	1
56	Particle detectors based on InP Schottky diodes. Journal of Instrumentation, 2012, 7, C10005-C10005.	0.5	1
57	Lattice-Mismatched Epitaxial Growth On Porous III-V Substrates. ECS Transactions, 2013, 58, 53-60.	0.3	1
58	Electrophoretic Deposition of Metal Nanoparticle Monolayers from Nonpolar Solvents for Hydrogen Sensing. Key Engineering Materials, 2015, 654, 213-217.	0.4	1
59	Spectroscopic properties of nanostructured molybdenum oxysulfide deposits fabricated by MoO <sub>3</sub> evaporation in H <sub>2</sub> S. Materials Letters, 2020, 275, 128075.	1.3	1
60	Tunable visible emission in nanostructured thin films and bulk ZnO. Journal of Sol-Gel Science and Technology, 2022, 102, 447-453.	1.1	1
61	Novel Approach to Preparation of InP Layers for Radiation Detectors. Materials Science Forum, 2005, 480-481, 483-488.	0.3	0
62	High Purity p-type InP Grown by LPE with Rare-Earth Admixtures. , 2006, , .		0
63	InP based semiconductor structures for radiation detection. Journal of Materials Science: Materials in Electronics, 2008, 19, 770-775.	1.1	0
64	Role of rare-earth elements in the design of radiation detectors and electroluminescent sources. , 2008, , .		0
65	Growth of InP crystals with rare-earth elements. , 2009, , .		0
66	Impact of Pr on the properties of InP based layers for light sources and detectors. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2801-2803.	0.8	0
67	Strain accommodation within porous buffer layers in heteroepitaxial growth. , 2012, , .		0
68	High-resolution X-ray diffraction and electron microscopy study of porous GaAs substrates. Proceedings of SPIE, 2013, , .	0.8	0
69	Detection of hydrogen at room temperature with graphite-Pt nanoparticles/Si Schottky diodes. , 2013, , .		0
70	Hydrogen Detection with Semimetal Graphite-ZnO (InP,GaN) Schottky Diodes. Key Engineering Materials, 2013, 543, 159-162.	0.4	0
71	The effect of surface morphology of ZnO nanorods on the sensing response of graphite/ZnO nanorod junctions. , 2015, , .		0
72	Well-aligned ZnO nanorods grown directly on GaN substrates for optoelectronic applications. , 2016, , .		0

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73	Understanding of the Charge Origin in Nonpolar Suspensions to Control the Formation of Platinum Nanoparticle Monolayers by Electrophoretic Deposition. ECS Transactions, 2018, 82, 33-38.	0.3	0
74	Homogeneous Resistive Switching in Individual ZnO Nanorod p-n Junctions. , 2019, , .		0
75	Structure, Optical and Electrical Properties of the High Doped ZnO Thin Films Deposited By RF Magnetron Sputtering of Powder Target in Methane Ambient. ECS Meeting Abstracts, 2021, MA2021-01, 1083-1083.	0.0	0
76	Chemical vapor deposition of germanium-rich CrGe <sub>x</sub> nanowires. Beilstein Journal of Nanotechnology, 2021, 12, 1365-1371.	1.5	0