

# Ion M Tiginyanu

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

83  
papers

1,324  
citations

16  
h-index

33  
g-index

100  
ext. papers

1,568  
ext. citations

3.7  
avg. IF

4.19  
L-index

#	Paper	IF	Citations
83	Core-Shell GaAs-Fe Nanowire Arrays: Fabrication Using Electrochemical Etching and Deposition and Study of Their Magnetic Properties.. <i>Nanomaterials</i> , <b>2022</b> , 12,	5.4	2
82	Highly Porous and Ultra-Lightweight Aero-GaO: Enhancement of Photocatalytic Activity by Noble Metals. <i>Materials</i> , <b>2021</b> , 14,	3.5	3
81	Ultrafast Third-Order Nonlinear Optical Response Excited by fs Laser Pulses at 1550 nm in GaN Crystals. <i>Materials</i> , <b>2021</b> , 14,	3.5	1
80	Crystallinity and optical properties of Ga <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> S <sub>3</sub> layered structure obtained by thermal annealing of Ga <sub>2</sub> S <sub>3</sub> semiconductor. <i>Materials Science in Semiconductor Processing</i> , <b>2021</b> , 121, 105314	4.3	2
79	Self-Propelled Aero-GaN Based Liquid Marbles Exhibiting Pulsed Rotation on the Water Surface. <i>Materials</i> , <b>2021</b> , 14,	3.5	1
78	Aero-GaO Nanomaterial Electromagnetically Transparent from Microwaves to Terahertz for Internet of Things Applications. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	6
77	Aero-ZnS architectures with dual hydrophilic/hydrophobic properties for microfluidic applications. <i>APL Materials</i> , <b>2020</b> , 8, 061105	5.7	4
76	Electrochemical nanostructuring of (111) oriented GaAs crystals: from porous structures to nanowires. <i>Beilstein Journal of Nanotechnology</i> , <b>2020</b> , 11, 966-975	3	5
75	Mesenchymal stem cells proliferation and remote manipulation upon exposure to magnetic semiconductor nanoparticles. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , <b>2020</b> , 25, e00435	5.3	4
74	Free-Standing Large-Area Nanoperforated Gold Membranes Fabricated by Hopping Electrodeposition. <i>ECS Journal of Solid State Science and Technology</i> , <b>2020</b> , 9, 064010	2	3
73	Porous semiconductor compounds. <i>Semiconductor Science and Technology</i> , <b>2020</b> , 35, 103001	1.8	12
72	Advanced Hybrid GaN/ZnO Nanoarchitected Microtubes for Fluorescent Micromotors Driven by UV Light. <i>Small</i> , <b>2020</b> , 16, e1905141	11	9
71	Individual CdS-covered aerographite microtubes for room temperature VOC sensing with high selectivity. <i>Materials Science in Semiconductor Processing</i> , <b>2019</b> , 100, 275-282	4.3	7
70	Electromagnetic interference shielding in X-band with aero-GaN. <i>Nanotechnology</i> , <b>2019</b> , 30, 34LT01	3.4	8
69	Sensing up to 40 atm Using Pressure-Sensitive Aero-GaN. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2019</b> , 13, 1900012	2.5	11
68	Synthesis and optical properties of Ga <sub>2</sub> O <sub>3</sub> nanowires grown on GaS substrate. <i>Thin Solid Films</i> , <b>2019</b> , 689, 137502	2.2	5
67	Modulation of Electrical Conductivity and Lattice Distortions in Bulk HVPE-Grown GaN. <i>ECS Journal of Solid State Science and Technology</i> , <b>2019</b> , 8, Q141-Q146	2	3

66	Terahertz shielding properties of aero-GaN. <i>Semiconductor Science and Technology</i> , <b>2019</b> , 34, 12LT02	1.8	8
65	Self-organized and self-propelled aero-GaN with dual hydrophilic-hydrophobic behaviour. <i>Nano Energy</i> , <b>2019</b> , 56, 759-769	17.1	16
64	Improving gas sensing by CdTe decoration of individual Aerographite microtubes. <i>Nanotechnology</i> , <b>2019</b> , 30, 065501	3.4	5
63	ZnAl <sub>2</sub> O <sub>4</sub> -Functionalized Zinc Oxide Microstructures for Highly Selective Hydrogen Gas Sensing Applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700772	1.6	10
62	Zinc oxide nanotetrapods with four different arm morphologies for versatile nanosensors. <i>Sensors and Actuators B: Chemical</i> , <b>2018</b> , 262, 425-435	8.5	44
61	A SnS <sub>2</sub> -based photomemristor driven by sun. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 024506	2.5	7
60	Ultrafast third-order optical nonlinearity in SnS <sub>2</sub> layered compound for photonic applications. <i>Optical Materials</i> , <b>2018</b> , 76, 69-74	3.3	6
59	Flexible pressure sensor based on graphene aerogel microstructures functionalized with CdS nanocrystalline thin film. <i>Superlattices and Microstructures</i> , <b>2018</b> , 117, 418-422	2.8	8
58	Properties of a single SnO <sub>2</sub> :Zn <sub>2</sub> SnO <sub>4</sub> Functionalized nanowire based nanosensor. <i>Ceramics International</i> , <b>2018</b> , 44, 4859-4867	5.1	26
57	Learning mechanisms in memristor networks based on GaN nanomembranes. <i>Journal of Applied Physics</i> , <b>2018</b> , 124, 152110	2.5	6
56	Hierarchical Aerographite 3D flexible networks hybridized by InP micro/nanostructures for strain sensor applications. <i>Scientific Reports</i> , <b>2018</b> , 8, 13880	4.9	4
55	Possible coherent backscattering of lightwaves from a strongly absorbing nanoporous medium. <i>Journal of Optics (United Kingdom)</i> , <b>2018</b> , 20, 075606	1.7	1
54	Size-dependent UV and gas sensing response of individual Fe <sub>2</sub> O <sub>3</sub> -ZnO:Fe micro- and nanowire based devices. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 701, 920-925	5.7	27
53	Atomically thin semiconducting layers and nanomembranes: a review. <i>Semiconductor Science and Technology</i> , <b>2017</b> , 32, 033001	1.8	5
52	Multilayer porous structures on GaN for the fabrication of Bragg reflectors <b>2017</b> ,		3
51	Targeting Endothelial Cells with Multifunctional GaN/Fe Nanoparticles. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 486	5	7
50	Silver-doped zinc oxide single nanowire multifunctional nanosensor with a significant enhancement in response. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 223, 893-903	8.5	145
49	Strong light scattering and broadband (UV to IR) photoabsorption in stretchable 3D hybrid architectures based on Aerographite decorated by ZnO nanocrystallites. <i>Scientific Reports</i> , <b>2016</b> , 6, 32913	4.9	47

48	Ultra-lightweight pressure sensor based on graphene aerogel decorated with piezoelectric nanocrystalline films. <i>Nanotechnology</i> , <b>2016</b> , 27, 475203	3.4	12
47	Multifunctional device based on ZnO:Fe nanostructured films with enhanced UV and ultra-fast ethanol vapour sensing. <i>Materials Science in Semiconductor Processing</i> , <b>2016</b> , 49, 20-33	4.3	62
46	Self-Organized Three-Dimensional Nanostructured Architectures in Bulk GaN Generated by Spatial Modulation of Doping. <i>ECS Journal of Solid State Science and Technology</i> , <b>2016</b> , 5, P218-P227	2	15
45	Enhanced ethanol vapour sensing performances of copper oxide nanocrystals with mixed phases. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 224, 434-448	8.5	120
44	Viability and proliferation of endothelial cells upon exposure to GaN nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , <b>2016</b> , 7, 1330-1337	3	10
43	Template Assisted Formation of Metal Nanotubes. <i>Nanoscience and Technology</i> , <b>2016</b> , 473-506	0.6	1
42	Light-Induced Motion of Microengines Based on Microarrays of TiO Nanotubes. <i>Small</i> , <b>2016</b> , 12, 5497-5505	11	52
41	Microengines: Light-Induced Motion of Microengines Based on Microarrays of TiO <sub>2</sub> Nanotubes (Small 39/2016). <i>Small</i> , <b>2016</b> , 12, 5508-5508	11	
40	Memristive GaN ultrathin suspended membrane array. <i>Nanotechnology</i> , <b>2016</b> , 27, 295204	3.4	8
39	Integration of individual TiO <sub>2</sub> nanotube on the chip: Nanodevice for hydrogen sensing. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2015</b> , 9, 171-174	2.5	44
38	Fabrication of photonic crystal circuits based on GaN ultrathin membranes by maskless lithography <b>2015</b> ,		4
37	Rapid switching and ultra-responsive nanosensors based on individual shell@core Ga <sub>2</sub> O <sub>3</sub> /GaN:O@SnO <sub>2</sub> nanobelt with nanocrystalline shell in mixed phases. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 221, 544-555	8.5	58
36	Photocatalytic properties of TiO <sub>2</sub> nanotubes doped with Ag, Au and Pt or covered by Ag, Au and Pt nanodots. <i>Surface Engineering and Applied Electrochemistry</i> , <b>2015</b> , 51, 3-8	0.8	12
35	Three-dimensional Aerographite-GaN hybrid networks: single step fabrication of porous and mechanically flexible materials for multifunctional applications. <i>Scientific Reports</i> , <b>2015</b> , 5, 8839	4.9	40
34	Nanowire Networks: Three-Dimensional SnO <sub>2</sub> Nanowire Networks for Multifunctional Applications: From High-Temperature Stretchable Ceramics to Ultraresponsive Sensors (Adv. Electron. Mater. 8/2015). <i>Advanced Electronic Materials</i> , <b>2015</b> , 1, n/a-n/a	6.4	1
33	Three-Dimensional SnO <sub>2</sub> Nanowire Networks for Multifunctional Applications: From High-Temperature Stretchable Ceramics to Ultraresponsive Sensors. <i>Advanced Electronic Materials</i> , <b>2015</b> , 1, 1500081	6.4	104
32	Metallized Porous GaP Templates for Electronic and Photonic Applications. <i>ECS Journal of Solid State Science and Technology</i> , <b>2015</b> , 4, P57-P62	2	15
31	Formation of InP nanomembranes and nanowires under fast anodic etching of bulk substrates. <i>Electrochemistry Communications</i> , <b>2014</b> , 47, 29-32	5.1	11

30	Structural and Vibrational Properties of CdAl <sub>2</sub> S <sub>4</sub> under High Pressure: Experimental and Theoretical Approach. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 15363-15374	3.8	6
29	Versatile Growth of Freestanding Orthorhombic $\alpha$ -Molybdenum Trioxide Nano- and Microstructures by Rapid Thermal Processing for Gas Nanosensors. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 15068-15078	3.8	95
28	Photonic Crystal Structures Based on GaN Ultrathin Membranes. <i>Journal of Nanoelectronics and Optoelectronics</i> , <b>2014</b> , 9, 271-275	1.3	4
27	Structural and Vibrational Study of Pseudocubic CdIn <sub>2</sub> Se <sub>4</sub> under Compression. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 26987-26999	3.8	7
26	Obtaining of II-VI compound substrates with controlled electrical parameters and prospects of their application for nanoporous structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2014</b> , 11, 1404-1407		2
25	GaN nanostructuring for the fabrication of thin membranes and emerging applications. <i>Turkish Journal of Physics</i> , <b>2014</b> , 38, 328-368	1.6	3
24	The impact of nanoporification on persistent photoconductivity and optical quenching effects in suspended GaN nanomembranes. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 243113	3.4	3
23	Effect of Al Sn $\delta$ -Doping on properties of zinc oxide nanostructured films grown by magnetron sputtering <b>2013</b> ,		1
22	Design of titania nanotube structures by focused laser beam direct writing. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 234302	2.5	11
21	Design and maskless fabrication of ultrathin suspended membranes of GaN. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2012</b> , 6, 148-150	2.5	7
20	Two-Dimensional Metallo-Semiconductor Networks for Electronic and Photonic Applications. <i>ECS Transactions</i> , <b>2012</b> , 41, 67-74	1	7
19	Hydrophobic ZnO used in EWOD technology and SAW devices for better bio-fluid slip AT microchannel walls controlled by DC pulses <b>2012</b> ,		2
18	Membrane-assisted revelation of the spatial nanoarchitecture of dislocation networks. <i>Materials Letters</i> , <b>2011</b> , 65, 360-362	3.3	13
17	Integration of Ge nanowire arrays in glass micro-fibers. <i>Surface Engineering and Applied Electrochemistry</i> , <b>2011</b> , 47, 103-106	0.8	5
16	Ultra-thin semiconductor membrane nanotechnology based on surface charge lithography <b>2011</b> ,		2
15	Porous InP as Piezoelectric Component in Magneto-Electric Composite Sensors. <i>ECS Transactions</i> , <b>2011</b> , 35, 67-72	1	2
14	Ultra-Thin GaN Membranes Fabricated by Using Surface Charge Lithography. <i>ECS Transactions</i> , <b>2011</b> , 35, 13-19	1	2
13	Self-organized nucleation layer for the formation of ordered arrays of double-walled TiO <sub>2</sub> nanotubes with temperature controlled inner diameter. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2010</b> , 4, 100-102	2.5	17

12	Exceptional integration of metal or semimetal nanowires in human-hair-like glass fiber. <i>Materials Letters</i> , <b>2010</b> , 64, 1902-1904	3.3	19
11	Cathodoluminescence of TiO <sub>2</sub> nanotubes prepared by low-temperature anodization of Ti foils. <i>Materials Letters</i> , <b>2010</b> , 64, 2155-2158	3.3	9
10	Surface charge lithography for GaN micro- and nanostructuring <b>2009</b> ,		2
9	Raman scattering by porous structures with InAs quantum dots. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 883-885		
8	Self-induced oscillation of the macropore diameter in n-type silicon. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1533-1535		4
7	ZnSe-based conductive nanotemplates for nanofabrication. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2009</b> , 3, 97-99	2.5	6
6	Fabrication of GaN nanowalls and nanowires using surface charge lithography. <i>Materials Letters</i> , <b>2008</b> , 62, 4576-4578	3.3	16
5	Ordered arrays of metal nanotubes in semiconductor envelope. <i>Electrochemistry Communications</i> , <b>2008</b> , 10, 731-734	5.1	35
4	Environmentally friendly approach for nonlithographic nanostructuring of materials. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2007</b> , 1, 98-100	2.5	7
3	Photoluminescence of Eu-doped ZnO structures <b>2005</b> ,		2
2	Micro-Raman study of columnar GaAs nanostructures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2005</b> , 202, 1562-1566	1.6	3
1	Efficient Focusing with an Ultra-Low Effective-Index Lens Based on Photonic Crystals. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 869, 441		1