

Roman V Viter

List of Publications by Year in descending order

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90
papers

3,342
citations

109321

35
h-index

155660

55
g-index

91
all docs

91
docs citations

91
times ranked

3992
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical biosensors based on ZnO nanostructures: advantages and perspectives. A review. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 664-677.	7.8	253
2	Application of 2D Non-Graphene Materials and 2D Oxide Nanostructures for Biosensing Technology. <i>Sensors</i> , 2016, 16, 223.	3.8	128
3	Hybrid electrochemical/electrochromic Cu(II) ion sensor prototype based on PANI/ITO-electrode. <i>Sensors and Actuators B: Chemical</i> , 2017, 248, 527-535.	7.8	118
4	Tuning Optical Properties of Al ₂ O ₃ /ZnO Nanolaminates Synthesized by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2014, 118, 3811-3819.	3.1	111
5	Analytical, thermodynamical and kinetic characteristics of photoluminescence immunosensor for the determination of Ochratoxin A. <i>Biosensors and Bioelectronics</i> , 2018, 99, 237-243.	10.1	96
6	Evolution of microstructure and related optical properties of ZnO grown by atomic layer deposition. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 690-698.	2.8	92
7	Mesoporous ZnFe ₂ O ₄ @TiO ₂ Nanofibers Prepared by Electrospinning Coupled to PECVD as Highly Performing Photocatalytic Materials. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24669-24677.	3.1	88
8	Enhancement of Electronic and Optical Properties of ZnO/Al ₂ O ₃ Nanolaminate Coated Electrospun Nanofibers. <i>Journal of Physical Chemistry C</i> , 2016, 120, 5124-5132.	3.1	87
9	Continuous sensing of hydrogen peroxide and glucose via quenching of the UV and visible luminescence of ZnO nanoparticles. <i>Mikrochimica Acta</i> , 2015, 182, 1819-1826.	5.0	82
10	High photodegradation and antibacterial activity of BN@Ag/TiO ₂ composite nanofibers under visible light. <i>New Journal of Chemistry</i> , 2018, 42, 1250-1259.	2.8	80
11	Enhanced photocatalytic performance of novel electrospun BN/TiO ₂ composite nanofibers. <i>New Journal of Chemistry</i> , 2017, 41, 81-89.	2.8	79
12	Tuning of Structural and Optical Properties of Graphene/ZnO Nanolaminates. <i>Journal of Physical Chemistry C</i> , 2016, 120, 23716-23725.	3.1	75
13	ZnO/polyaniline composite based photoluminescence sensor for the determination of acetic acid vapor. <i>Talanta</i> , 2020, 211, 120658.	5.5	75
14	BN/GdxTi(1-x)O(4-x)/2 nanofibers for enhanced photocatalytic hydrogen production under visible light. <i>Applied Catalysis B: Environmental</i> , 2019, 251, 76-86.	20.2	73
15	Toward development of optical biosensors based on photoluminescence of TiO ₂ nanoparticles for the detection of Salmonella. <i>Sensors and Actuators B: Chemical</i> , 2017, 252, 95-102.	7.8	70
16	Tuning of ZnO 1D nanostructures by atomic layer deposition and electrospinning for optical gas sensor applications. <i>Nanotechnology</i> , 2015, 26, 105501.	2.6	67
17	Porous silicon based photoluminescence immunosensor for rapid and highly-sensitive detection of Ochratoxin A. <i>Biosensors and Bioelectronics</i> , 2018, 102, 661-667.	10.1	64
18	The influence of localized plasmons on the optical properties of Au/ZnO nanostructures. <i>Journal of Materials Chemistry C</i> , 2015, 3, 6815-6821.	5.5	63

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19	Study on Structural, Mechanical, and Optical Properties of Al ₂ O ₃ –TiO ₂ Nanolaminates Prepared by Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2015, 119, 20591-20599.	3.1	63
20	Gold coated porous silicon nanocomposite as a substrate for photoluminescence-based immunosensor suitable for the determination of Aflatoxin B1. <i>Talanta</i> , 2017, 175, 297-304.	5.5	59
21	Application of Room Temperature Photoluminescence From ZnO Nanorods for Salmonella Detection. <i>IEEE Sensors Journal</i> , 2014, 14, 2028-2034.	4.7	57
22	Biosensors for the Determination of SARS-CoV-2 Virus and Diagnosis of COVID-19 Infection. <i>International Journal of Molecular Sciences</i> , 2022, 23, 666.	4.1	57
23	Affinity Sensors for the Diagnosis of COVID-19. <i>Micromachines</i> , 2021, 12, 390.	2.9	56
24	Tailoring the Structural, Optical, and Photoluminescence Properties of Porous Silicon/TiO ₂ Nanostructures. <i>Journal of Physical Chemistry C</i> , 2015, 119, 7164-7171.	3.1	53
25	Photoluminescence immunosensor based on bovine leukemia virus proteins immobilized on the ZnO nanorods. <i>Sensors and Actuators B: Chemical</i> , 2019, 285, 601-606.	7.8	53
26	Photoelectrochemical Bisphenol S Sensor Based on ZnO Nanorods Modified by Molecularly Imprinted Polypyrrole. <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 1900232.	2.2	53
27	Photoluminescence: A very sensitive tool to detect the presence of anatase in rutile phase electrospun TiO ₂ nanofibers. <i>Superlattices and Microstructures</i> , 2015, 77, 18-24.	3.1	48
28	Enhancement of calcium copper titanium oxide photoelectrochemical performance using boron nitride nanosheets. <i>Chemical Engineering Journal</i> , 2020, 389, 124326.	12.7	48
29	Synthesis of novel ZnO/ZnAl ₂ O ₄ multi co-centric nanotubes and their long-term stability in photocatalytic application. <i>RSC Advances</i> , 2016, 6, 103692-103699.	3.6	47
30	Cell and tissue response to nanotextured Ti6Al4V and Zr implants using high-speed femtosecond laser-induced periodic surface structures. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2019, 21, 102036.	3.3	45
31	Towards an Electrochemical Immunosensor for the Detection of Antibodies against SARS-CoV-2 Spike Protein. <i>Journal of the Electrochemical Society</i> , 2022, 169, 037523.	2.9	41
32	ALD thin ZnO layer as an active medium in a fiber-optic Fabry–Perot interferometer. <i>Sensors and Actuators A: Physical</i> , 2015, 221, 88-94.	4.1	40
33	Application of Thin ZnO ALD Layers in Fiber-Optic Fabry–Perot Sensing Interferometers. <i>Sensors</i> , 2016, 16, 416.	3.8	38
34	Highly textured boron/nitrogen co-doped TiO ₂ with honeycomb structure showing enhanced visible-light photoelectrocatalytic activity. <i>Applied Surface Science</i> , 2020, 505, 144419.	6.1	38
35	Photoluminescence Study of Defects in ZnO-Coated Polyacrylonitrile Nanofibers. <i>Journal of Physical Chemistry C</i> , 2020, 124, 9434-9441.	3.1	37
36	From Microorganism-Based Amperometric Biosensors towards Microbial Fuel Cells. <i>Sensors</i> , 2021, 21, 2442.	3.8	36

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37	Synthesis of ZnO nanoneedles by thermal oxidation of Zn thin films. <i>Journal of Non-Crystalline Solids</i> , 2013, 377, 212-216.	3.1	34
38	Tailoring of the electronic properties of ZnO-polyacrylonitrile nanofibers: Experiment and theory. <i>Applied Surface Science</i> , 2017, 411, 494-501.	6.1	34
39	Synthesis and photoluminescence properties of hybrid 1D core-shell structured nanocomposites based on ZnO/polydopamine. <i>RSC Advances</i> , 2020, 10, 29751-29758.	3.6	34
40	Whispering gallery mode resonator and glucose oxidase based glucose biosensor. <i>Sensors and Actuators B: Chemical</i> , 2020, 318, 128004.	7.8	33
41	A Novel Optochemical Sensor Based on SnO_2 Sensitive Thin Film for ppm Ammonia Detection in Liquid Environment. <i>Journal of Lightwave Technology</i> , 2006, 24, 5000-5007.	4.6	31
42	Segregation of copper oxide on calcium copper titanate surface induced by Graphene Oxide for Water splitting applications. <i>Applied Surface Science</i> , 2020, 516, 146051.	6.1	31
43	Tunable TiO_2 -Pd nanofibers by combining electrospinning and atomic layer deposition to enhance photodegradation of acetaminophen. <i>Dalton Transactions</i> , 2022, 51, 2674-2695.	3.3	31
44	Electrochemically Deposited Molecularly Imprinted Polymer-Based Sensors. <i>Sensors</i> , 2022, 22, 1282.	3.8	30
45	Grain size dependent bandgap shift of SnO_2 nanofibers. <i>Metals and Materials International</i> , 2014, 20, 163-167.	3.4	29
46	Electrochemical Determination of Interaction between SARS-CoV-2 Spike Protein and Specific Antibodies. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6768.	4.1	27
47	Zinc oxide nanorod based immunosensing platform for the determination of human leukemic cells. <i>Talanta</i> , 2019, 200, 378-386.	5.5	26
48	Photoelectrocatalysis of paracetamol on Pd-ZnO/ N-doped carbon nanofibers electrode. <i>Applied Materials Today</i> , 2021, 24, 101129.	4.3	26
49	Optical properties of ultrathin $\text{Al}_2\text{O}_3/\text{ZnO}$ nanolaminates. <i>Thin Solid Films</i> , 2015, 594, 96-100.	1.8	25
50	Novel Immune TiO_2 Photoluminescence Biosensors for Leucosis Detection. <i>Procedia Engineering</i> , 2012, 47, 338-341.	1.2	24
51	Application of Polydopamine Functionalized Zinc Oxide for Glucose Biosensor Design. <i>Polymers</i> , 2021, 13, 2918.	4.5	23
52	Optical and structural properties of Al_2O_3 doped ZnO nanotubes prepared by ALD and their photocatalytic application. <i>Surface and Coatings Technology</i> , 2018, 343, 24-29.	4.8	21
53	Influence of PDA Coating on the Structural, Optical and Surface Properties of ZnO Nanostructures. <i>Nanomaterials</i> , 2020, 10, 2438.	4.1	21
54	Influence of ZnO/graphene nanolaminate periodicity on their structural and mechanical properties. <i>Journal of Materials Science and Technology</i> , 2018, 34, 1487-1493.	10.7	20

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55	Bioanalytical system for detection of cancer cells with photoluminescent ZnO nanorods. Nanotechnology, 2016, 27, 465101.	2.6	19
56	Optical properties of ZnO deposited by atomic layer deposition (ALD) on Si nanowires. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2018, 236-237, 139-146.	3.5	19
57	Biocompatibility and Antibacterial Properties of ZnO-Incorporated Anodic Oxide Coatings on TiZrNb Alloy. Nanomaterials, 2020, 10, 2401.	4.1	19
58	Metal Oxide Nanostructures in Sensing. , 2019, , 41-91.		18
59	Photoluminescent Detection of Human T-Lymphoblastic Cells by ZnO Nanorods. Molecules, 2020, 25, 3168.	3.8	18
60	Superior efficiency of BN/Ce2O3/TiO2 nanofibers for photocatalytic hydrogen generation reactions. Applied Surface Science, 2022, 594, 153438.	6.1	18
61	Kinetics of TiO2 photochromic response in different hole scavenging solvents. Photochemical and Photobiological Sciences, 2020, 19, 1072-1077.	2.9	17
62	Optochemical sensor for water monitoring based on SnO2 particle layer deposited onto optical fibers by the electrospray pyrolysis method. Applied Physics Letters, 2006, 89, 111103.	3.3	16
63	Immune Biosensor Based on Silica Nanotube Hydrogels for Rapid Biochemical Diagnostics of Bovine Retroviral Leukemia. Procedia Engineering, 2011, 25, 948-951.	1.2	16
64	Space charge limited current mechanism in Bi2S3 nanowires. Journal of Applied Physics, 2016, 119, .	2.5	15
65	Synthesis, Optical, and Morphological Studies of ZnO Powders and Thin Films Fabricated by Wet Chemical Methods. Materials, 2020, 13, 2559.	2.9	13
66	Bioactivity Performance of Pure Mg after Plasma Electrolytic Oxidation in Silicate-Based Solutions. Molecules, 2021, 26, 2094.	3.8	13
67	Scanning electrochemical microscopy and electrochemical impedance spectroscopy-based characterization of perforated polycarbonate membrane modified by carbon-nanomaterials and glucose oxidase. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 624, 126822.	4.7	11
68	Modification of physicochemical properties and bioactivity of oxide coatings formed on Ti substrates via plasma electrolytic oxidation in crystalline and amorphous calcium phosphate particle suspensions. Applied Surface Science, 2022, 598, 153793.	6.1	10
69	Optical and structural properties of Al ₂ O ₃ /ZnO nanolaminates deposited by ALD method. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 1505-1508.	0.8	7
70	Improved Crystalline Structure and Enhanced Photoluminescence of ZnO Nanolayers in Bi ₂ Se ₃ /ZnO Heterostructures. Journal of Physical Chemistry C, 2019, 123, 31156-31166.	3.1	7
71	http://www.elsevier.com/xml/ja/dtd xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	1.2	4
72	Whispering gallery mode resonators covered by a ZnO nanolayer. Optik, 2020, 219, 165296.	2.9	4

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73	TiO ₂ optical sensor for amino acid detection. Proceedings of SPIE, 2013, , .	0.8	3
74	Structural and optical properties of TiO ₂ –Al ₂ O ₃ nanolaminates produced by atomic layer deposition. , 2015, , .		3
75	Development of optical WGM resonators for biosensors. , 2017, , .		3
76	Optical Spectroscopy for Characterization of Metal Oxide Nanofibers. , 2019, , 523-556.		3
77	Tin dioxide based optical sensor for in water ppm detection of ammonia at room temperature. , 2005, , .		2
78	Simultaneous Temperature and Ammonia Detection in Water by Tin-Dioxide Optoelectronic Sensor. , 0, , .		2
79	Towards electrochemical/electrochromic sensors based on polyaniline modified indium tin oxide electrodes. , 2017, , .		2
80	Optical Spectroscopy for Characterization of Metal Oxide Nanofibers. , 2018, , 1-35.		2
81	Ammonia detection in water with a tin dioxide based optical sensor. , 2005, , .		1
82	Influence of Layers Morphology on the Sensitivity of SnO ₂ -based Optical Fiber Sensors. , 2006, , .		1
83	Photoluminescence ZnO nanorod biosensors for medical and food safety applications. , 2017, , .		1
84	Porous silicon photoluminescence biosensor for rapid and sensitive detection of toxins. , 2017, , .		1
85	Whispering gallery mode resonators coated with Au nanoparticles. , 2019, , .		1
86	Cell and Tissue Response to Modified by Laser-induced Periodic Surface Structures Biocompatible Materials for Dental Implants. , 2016, , .		1
87	Room temperature detection of chemical pollutants by SnO ₂ -based optical fiber sensors. , 2007, , .		0
88	High sensitivity near-field opto-chemical sensors based on SnO ₂ particle layers. , 2007, , .		0
89	Whispering Gallery Mode Resonator Sensors Referenced to Saturated Absorption Lines in Rubidium Atoms and a fs Frequency Comb. , 2019, , .		0
90	ZnO Nanorods Room Temperature Photoluminescence Biosensors For Salmonella Detection. , 2012, , .		0