Albena Ivanisevic

List of Publications by Year
in descending order

130	2,628	201674	243625
papers	citations	27 h-index	44 g-index

130	130	130	3533
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tuning Microbial Activity via Programmatic Alteration of Cell/Substrate Interfaces. Advanced Materials, 2021, 33, e2004655.	21.0	6
2	Modulating the Stress Response of E. coli at GaN Interfaces Using Surface Charge, Surface Chemistry, and Genetic Mutations. ACS Applied Bio Materials, 2020, 3, 7211-7218.	4.6	2
3	Oxidative Stress Transcriptional Responses of Escherichia coli at GaN Interfaces. ACS Applied Bio Materials, 2020, 3, 9073-9081.	4.6	1
4	Behavior of E. coli with Variable Surface Morphology Changes on Charged Semiconductor Interfaces. ACS Applied Bio Materials, 2019, 2, 4044-4051.	4.6	5
5	Modification of the Surface Properties of Al_xGa_{1â€“x}N Substrates with Gradient Aluminum Composition Using Wet Chemical Treatments. ACS Omega, 2019, 4, 11760-11769.	3.5	4
6	Interfacial Properties of Doped Semiconductor Materials Can Alter the Behavior of Pseudomonas aeruginosa Films. ACS Applied Electronic Materials, 2019, 1, 1641-1652.	4.3	3
7	Nanostructured Oxides Containing Ga: Materials with Unique Properties for Aqueous-Based Applications. ACS Omega, 2019, 4, 6876-6882.	3.5	5
8	Nanostructured GaOOH modified with reactive yellow, red and blue water-soluble dyes. AIP Advances, 2019, 9, .	1.3	5
9	Passivation of semipolar (10-1-1) GaN with different organic adsorbates. Materials Letters, 2019, 236, 201-204.	2.6	10
10	Noninvasive Stimulation of Neurotypic Cells Using Persistent Photoconductivity of Gallium Nitride. ACS Omega, 2018, 3, 615-621.	3.5	20
11	Variably doped nanostructured gallium nitride surfaces can serve as biointerfaces for neurotypic PC12 cells and alter their behavior. RSC Advances, 2018, 8, 36722-36730.	3.6	7
12	Ga Ion-Enhanced and Particle Shape-Dependent Generation of Reactive Oxygen Species in X-ray-Irradiated Composites. ACS Omega, 2018, 3, 5252-5259.	3.5	6
13	Bulk and Surface Electronic Properties of Inorganic Materials: Tools to Guide Cellular Behavior. Small Methods, 2018, 2, 1800016.	8.6	5
14	Characterization of Pseudomonas aeruginosa Films on Different Inorganic Surfaces before and after UV Light Exposure. Langmuir, 2018, 34, 10806-10815.	3.5	5
15	Bioelectronics communication: encoding yeast regulatory responses using nanostructured gallium nitride thin films. Nanoscale, 2018, 10, 11506-11516.	5.6	8
16	Gallium containing composites as a tunable material to understand neuronal behavior under variable stiffness and radiation conditions. Materials Science and Engineering C, 2017, 71, 317-321.	7.3	2
17	Persistent Photoconductivity, Nanoscale Topography, and Chemical Functionalization Can Collectively Influence the Behavior of PC12 Cells on Wide Bandgap Semiconductor Surfaces. Small, 2017, 13, 1700481.	10.0	29
18	Synthesis and optical characterization of mixed nanostructured aluminumâ€“gallium oxy-hydroxide. Materials Research Letters, 2017, 5, 124-127.	8.7	1

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19	Tuning the biocompatibility of aluminum nitride. Materials Letters, 2017, 189, 1-4.	2.6	22
20	HgNO3 sensitivity of AlGaN/GaN field effect transistors functionalized with phytochelating peptides. AIP Advances, 2016, 6, 065105.	1.3	1
21	In situ and ex situ functionalization of nanostructured gallium oxyâ€hydroxide with a porphyrin dye. Scanning, 2016, 38, 671-683.	1.5	9
22	Photoluminescence changes of III-Nitride lateral polarity structures after chemical functionalization. Materials Research Express, 2016, 3, 125906.	1.6	1
23	Aqueous stability of nanostructured aluminum and gallium oxyhydroxide before and after functionalization with lysine. Materials Letters, 2016, 184, 278-281.	2.6	5
24	Preface to Forum on â€œInterfaces for Mechanobiology and Mechanochemistry: From 2-D to 3-D Platformsâ€• ACS Applied Materials & Interfaces, 2016, 8, 21847-21847.	8.0	1
25	Nanoscale topography, semiconductor polarity and surface functionalization: additive and cooperative effects on PC12 cell behavior. RSC Advances, 2016, 6, 97873-97881.	3.6	15
26	Stability and Reliability of III-Nitride Based Biosensors. , 2016, , 149-196.		1
27	Interfaces with Tunable Mechanical and Radiosensitizing Properties. ACS Applied Materials & Interfaces, 2016, 8, 21956-21961.	8.0	5
28	Neurotypic cell attachment and growth on III-nitride lateral polarity structures. Materials Science and Engineering C, 2016, 58, 1194-1198.	7.3	14
29	A review of in situ surface functionalization of gallium nitride via beaker wet chemistry. Journal of Materials Research, 2015, 30, 2859-2870.	2.6	20
30	In situ functionalization of gallium nitride powder with a porphyrin dye. Journal of Materials Research, 2015, 30, 2910-2918.	2.6	4
31	Long-term stability assessment of AlGaN/GaN field effect transistors modified with peptides: Device characteristics vs. surface properties. AIP Advances, 2015, 5, 097102.	1.3	7
32	Electronic Biosensors Based on III-Nitride Semiconductors. Annual Review of Analytical Chemistry, 2015, 8, 149-169.	5.4	66
33	Comparison of the Stability of Functionalized GaN and GaP. ChemPhysChem, 2015, 16, 1687-1694.	2.1	16
34	Adsorption and adhesion of common serum proteins to nanotextured gallium nitride. Nanoscale, 2015, 7, 2360-2365.	5.6	17
35	Modified surface chemistry, potential, and optical properties of polar gallium nitride via long chained phosphonic acids. Applied Surface Science, 2015, 327, 498-503.	6.1	25
36	Engineering the Cell-Semiconductor Interface: A Materials Modification Approach using II-VI and III-V Semiconductor Materials. Small, 2015, 11, 768-780.	10.0	20

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37	Surface Characterization of Gallium Nitride Modified with Peptides before and after Exposure to Ionizing Radiation in Solution. Langmuir, 2014, 30, 15477-15485.	3.5	16
38	Modulated optical properties of nonpolar gallium nitride via surface in-situ functionalization with cysteamine assisted phosphoric acid. Applied Surface Science, 2014, 295, 207-213.	6.1	3
39	Surface topography and chemistry shape cellular behavior on wide band-gap semiconductors. Acta Biomaterialia, 2014, 10, 2455-2462.	8.3	24
40	In Situ Chemical Functionalization of Gallium Nitride with Phosphonic Acid Derivatives during Etching. Langmuir, 2014, 30, 2038-2046.	3.5	27
41	Cell Behavior on Gallium Nitride Surfaces: Peptide Affinity Attachment versus Covalent Functionalization. Langmuir, 2013, 29, 8377-8384.	3.5	25
42	Materials characterization and mechanobiology of the eye. Materials Science and Engineering C, 2013, 33, 1867-1875.	7.3	10
43	Aqueous Stability of Ga- and N-Polar Gallium Nitride. Langmuir, 2013, 29, 216-220.	3.5	46
44	Biomolecular Gradients via Semiconductor Gradients: Characterization of Amino Acid Adsorption to In_xGa_{1â€“x}N Surfaces. ACS Applied Materials & Interfaces, 2013, 5, 7236-7243.	8.0	11
45	Inorganic material coatings and their effect on cytotoxicity. Chemical Society Reviews, 2012, 41, 2052-2060.	38.1	61
46	Kelvin Probe Force Microscopy Analysis of the Covalent Functionalization and DNA Modification of Gallium Phosphide Nanorods. Journal of Physical Chemistry C, 2012, 116, 12613-12620.	3.1	6
47	Parallel Dipâ€Pen Nanolithography using Sporeâ€•and Colloidâ€Terminated Cantilevers. Small, 2012, 8, 3791-3794.	10.0	3
48	Surface modifications on InAs decrease indium and arsenic leaching under physiological conditions. Applied Surface Science, 2012, 261, 842-850.	6.1	12
49	Wet-Chemical Passivation of InAs: Toward Surfaces with High Stability and Low Toxicity. Accounts of Chemical Research, 2012, 45, 1451-1459.	15.6	18
50	Quantitative Analysis of the Functionalization of Gallium Phosphide With Organic Azides. Scanning, 2012, 34, 332-340.	1.5	9
51	Deposition of Triamcinolone Acetonide and Its Effect on Soft Tissue Topography. Advanced Healthcare Materials, 2012, 1, 520-525.	7.6	0
52	Gallium nitride is biocompatible and non-toxic before and after functionalization with peptides. Acta Biomaterialia, 2012, 8, 728-733.	8.3	121
53	Characterization of Peptide Adsorption on InAs Using X-ray Photoelectron Spectroscopy. Langmuir, 2011, 27, 3774-3782.	3.5	15
54	Detecting DNA methylation through changes in transverse proton relaxation. Analyst, The, 2011, 136, 2441.	3.5	7

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55	Examining MRI Contrast in Three-Dimensional Cell Culture Phantoms with DNA-Templated Nanoparticle Chains. ACS Applied Materials & Interfaces, 2011, 3, 1282-1288.	8.0	33
56	Adsorption of Mixed Peptide/Thiol Adlayers on InAs: Assessment of Different Functionalization Strategies Using X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 14244-14252.	3.1	8
57	Spore-Terminated Cantilevers for Chemical Patterning on Complex Architectures. Journal of the American Chemical Society, 2011, 133, 9627-9629.	13.7	7
58	Morphological Properties of Collagen Fibers in Porcine Lamina Propria. Journal of Voice, 2011, 25, 254-257.	1.5	7
59	Goldâ€“iron oxide nanoparticle chains scaffolded on DNA as potential magnetic resonance imaging agents. Journal of Materials Chemistry, 2011, 21, 939-943.	6.7	18
60	Surface modification of vitreoretinal surgical instruments with layerâ€byâ€layer films. Scanning, 2011, 33, 397-401.	1.5	2
61	Multicomponent DNAâ€Templated Nanoparticle Chains with Controllable Dimension and Composition. Small, 2011, 7, 2021-2026.	10.0	3
62	Molecular Analysis of Blood with Microâ€/Nanoscale Fieldâ€Effectâ€Transistor Biosensors. Small, 2011, 7, 1863-1875.	10.0	103
63	Olefin metathesis reaction on GaN (0001) surfaces. Applied Surface Science, 2011, 257, 4625-4632.	6.1	23
64	Covalent attachment of a peptide to the surface of gallium nitride. Surface Science, 2011, 605, 1466-1475.	1.9	36
65	Mechanism of Proton Relaxation for Enzymeâ€Manipulated, Multicomponent Goldâ€“Magnetic Nanoparticle Chains. ChemPhysChem, 2010, 11, 3664-3672.	2.1	8
66	Functional silica nanoparticleâ€mediated neuronal membrane sealing following traumatic spinal cord injury. Journal of Neuroscience Research, 2010, 88, 1433-1444.	2.9	40
67	Amphiphilic silicones prepared from branched PEOâ€silanes with siloxane tethers. Journal of Polymer Science Part A, 2010, 48, 4108-4119.	2.3	22
68	Dipâ€pen nanolithography on SiO_x and tissueâ€derived substrates: comparison with multiple biological inks. Scanning, 2010, 32, 30-34.	1.5	7
69	Characterizing proton relaxation times for metallic and magnetic layer-by-layer-coated, DNA-templated nanoparticle chains. Nanotechnology, 2010, 21, 245103.	2.6	17
70	In vitro Cytotoxic Evaluation of Metallic and Magnetic DNA-Templated Nanostructures. ACS Applied Materials & Interfaces, 2010, 2, 1407-1413.	8.0	12
71	Transverse Relaxivity Changes after Layer-by-Layer Encapsulation of Multicomponent DNA Templated Nanostructures. Journal of Physical Chemistry C, 2010, 114, 22508-22513.	3.1	14
72	Quantitative Analysis of Human Internal Limiting Membrane Extracted from Patients with Macular Holes. Langmuir, 2010, 26, 12810-12816.	3.5	6

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73	DNA Immobilization on GaP(100) Investigated by Kelvin Probe Force Microscopy. Journal of Physical Chemistry C, 2010, 114, 15486-15490.	3.1	10
74	Characterization of Conformational Adsorbate Changes on a Tissue-Derived Substrate Using Fourier Transform Infrared Spectroscopy. Langmuir, 2010, 26, 18083-18088.	3.5	3
75	Serial and Parallel Dip-Pen Nanolithography Using a Colloidal Probe Tip. Journal of the American Chemical Society, 2010, 132, 4532-4533.	13.7	27
76	Assessment of the Passivation Capabilities of Two Different Covalent Chemical Modifications on GaP(100). Langmuir, 2010, 26, 8141-8146.	3.5	28
77	Collagen-Binding Peptidoglycans: A Biomimetic Approach to Modulate Collagen Fibrillogenesis for Tissue Engineering Applications. Tissue Engineering - Part A, 2009, 15, 2991-2999.	3.1	35
78	Modification of native collagen with cellâ€adhesive peptide to promote RPE cell attachment on Bruch's membrane. Biotechnology and Bioengineering, 2009, 102, 1723-1729.	3.3	13
79	Adsorption of amino acids on indium arsenide (100) surfaces: Assessment of passivation capabilities. Surface Science, 2009, 603, 907-911.	1.9	11
80	Characterization of amino acid adlayers on InAs surfaces using X-ray photoelectron spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2009, 172, 47-53.	1.7	17
81	A mesoporous silica nanosphere-based drug delivery system using an electrically conducting polymer. Nanotechnology, 2009, 20, 275102.	2.6	64
82	Circular dichroism study of enzymatic manipulation on magnetic and metallic DNA template nanowires. Colloids and Surfaces B: Biointerfaces, 2008, 67, 279-283.	5.0	8
83	Repairing the Damaged Spinal Cord and Brain with Nanomedicine. Small, 2008, 4, 1676-1681.	10.0	34
84	DNA Molecules on GaP (100) Surfaces: Spectroscopic Characterization and Biospecificity Assessment. ChemPhysChem, 2008, 9, 1528-1530.	2.1	6
85	Circular Dichroism Study of the Mechanism of Formation of DNA Templated Nanowires. ChemPhysChem, 2008, 9, 2203-2206.	2.1	27
86	Dipâ€Pen Nanolithography of Bioactive Peptides on Collagenâ€Terminated Retinal Membrane. Advanced Materials, 2008, 20, 3678-3681.	21.0	28
87	Fabrication of ordered metallic and magnetic heterostructured DNAâ€”Nanoparticle hybrids. Colloids and Surfaces B: Biointerfaces, 2008, 63, 296-300.	5.0	9
88	Lithography on GaP(100) surfaces. Surface Science, 2008, 602, 1993-1998.	1.9	4
89	Quantitative Evaluation of Covalently Bound Molecules on GaP (100) Surfaces. Journal of Physical Chemistry C, 2008, 112, 2147-2155.	3.1	27
90	Mixed Adlayer of Alkanethiol and Peptide on GaAs(100):â€‰ Quantitative Characterization by X-ray Photoelectron Spectroscopy. Langmuir, 2008, 24, 3164-3170.	3.5	14

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91	Collagen-Binding Peptide Interaction with Retinal Tissue Surfaces. Langmuir, 2008, 24, 1591-1594.	3.5	21
92	Magnetotransport of One-Dimensional Chains of CoFe₂O₄ Nanoparticles Ordered along DNA. Journal of Physical Chemistry C, 2008, 112, 3191-3193.	3.1	33
93	Heterostructured DNA templates: A combined magnetic force microscopy and circular dichroism study. Applied Physics Letters, 2008, 93, .	3.3	4
94	Electrical detection of the biological interaction of a charged peptide via gallium arsenide junction-field-effect transistors. Journal of Applied Physics, 2008, 103, 114510.	2.5	6
95	DNA-Templated Magnetic Nanowires with Different Compositions:Â Fabrication and Analysis. Langmuir, 2007, 23, 3886-3890.	3.5	73
96	Ligation of Nanoparticle Coated DNA Cleaved with Restriction Enzymes. Chemistry of Materials, 2007, 19, 3586-3588.	6.7	17
97	Cantilever-Based Sensor for the Detection of Different Chromophore Isomers. Analytical Chemistry, 2007, 79, 4702-4708.	6.5	8
98	Formation and Characterization of Homogeneous and Mixed Self-Assembled Monolayers of Peptides and Alkanethiols on Indium Phosphide Surfaces. Journal of Physical Chemistry C, 2007, 111, 3710-3718.	3.1	21
99	Comparison between Patterns Generated by Microcontact Printing and Dip-Pen Nanolithography on InP Surfaces. Journal of Physical Chemistry C, 2007, 111, 17989-17992.	3.1	9
100	Patterning of Polypeptides on a Collagen-Terminated Tissue Surface. Journal of Physical Chemistry C, 2007, 111, 11676-11681.	3.1	11
101	Elastomeric Nanoparticle Composites Covalently Bound to Al₂O₃/GaAs Surfaces. Langmuir, 2007, 23, 9472-9480.	3.5	13
102	Atomic Force Microscopy Investigation of Vocal Fold Collagen. Laryngoscope, 2007, 117, 1876-1881.	2.0	11
103	Taking charge of biomolecules. Nature Nanotechnology, 2007, 2, 596-597.	31.5	46
104	Molecular recognition of chromophore molecules to amine terminated surfaces. Applied Surface Science, 2007, 253, 4176-4181.	6.1	8
105	Dual restriction enzyme digest of cationic-gold-coated DNA scaffolds. International Journal of Nanomedicine, 2007, 2, 821-5.	6.7	0
106	Peptides on GaAs Surfaces:Â Comparison between Features Generated by Microcontact Printing and Dip-Pen Nanolithography. Langmuir, 2006, 22, 8670-8674.	3.5	24
107	Mapping the Interaction Forces between TAR RNA and TAT Peptides on GaAs Surfaces Using Chemical Force Microscopy. Langmuir, 2006, 22, 1768-1774.	3.5	9
108	Characterization of collagen fibers in Bruchâ€™s membrane using chemical force microscopy. Analytical and Bioanalytical Chemistry, 2006, 386, 652-657.	3.7	10

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109	In vitro assessment of the biocompatibility of chemically modified GaAs surfaces. Nanobiotechnology, 2006, 2, 51-59.	1.2	10
110	Selective placement of templated DNA nanowires between microstructured electrodes. International Journal of Nanomedicine, 2006, 1, 219-222.	6.7	1
111	Chromophore binding to in vitro engineered bio-mimetic surfaces. Applied Surface Science, 2005, 243, 7-10.	6.1	5
112	Templates for DNA-templated Fe3O4 nanoparticles. Biomaterials, 2005, 26, 2749-2757.	11.4	68
113	Fabrication of positively and negatively charged polyelectrolyte structures by dip-pen nanolithography. Journal of Materials Chemistry, 2005, 15, 649.	6.7	19
114	Study of the Morphological and Adhesion Properties of Collagen Fibers in the Bruch's Membrane. Journal of Physical Chemistry B, 2005, 109, 19052-19055.	2.6	12
115	Structural and adhesion properties of surfaces functionalized with polyelectrolytes and polystyrene particles. Talanta, 2005, 67, 503-506.	5.5	5
116	Covalent Attachment of TAT Peptides and Thiolated Alkyl Molecules on GaAs Surfaces. Journal of Physical Chemistry B, 2005, 109, 12731-12737.	2.6	32
117	Enzymatic Clipping of DNA Wires Coated with Magnetic Nanoparticles. Journal of the American Chemical Society, 2005, 127, 3276-3277.	13.7	72
118	TAT Peptide Immobilization on Gold Surfaces:â€‰ A Comparison Study with a Thiolated Peptide and Alkylthiols Using AFM, XPS, and FT-IRRAS. Journal of Physical Chemistry B, 2005, 109, 6225-6232.	2.6	39
119	Encapsulated cells: an atomic force microscopy study. Biomaterials, 2004, 25, 3655-3662.	11.4	19
120	Properties of Polyelectrolyte Templates Generated by Dip-Pen Nanolithography and Microcontact Printing. Chemistry of Materials, 2004, 16, 5216-5219.	6.7	20
121	SiOx Surfaces with Lithographic Features Composed of a TAT Peptide. Journal of Physical Chemistry B, 2004, 108, 15223-15228.	2.6	49
122	Chromophore Binding to In-vitro Engineered Bio-mimetic Surfaces. Materials Research Society Symposia Proceedings, 2003, 774, 7211.	0.1	0
123	Site-Directed Exchange Studies with Combinatorial Libraries of Nanostructures. Journal of the American Chemical Society, 2002, 124, 11997-12001.	13.7	41
124	â€œDip-Penâ€•Nanolithography on Semiconductor Surfaces. Journal of the American Chemical Society, 2001, 123, 7887-7889.	13.7	185
125	Redox-Controlled Orthogonal Assembly of Charged Nanostructures. Journal of the American Chemical Society, 2001, 123, 12424-12425.	13.7	21
126	Light-emitting diodes as chemical sensors. Nature, 2001, 409, 476-476.	27.8	76

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127	Linker-Enhanced Binding of Metalloporphyrins to Cadmium Selenide and Implications for Oxygen Detection. Langmuir, 2000, 16, 7852-7858.	3.5	15
128	Photoluminescent Properties of Cadmium Selenide in Contact with Solutions and Films of Metalloporphyrins:Â Nitric Oxide Sensing and Evidence for the Aversion of an Analyte to a Buried Semiconductorâ^'Film Interface. Journal of the American Chemical Society, 2000, 122, 3731-3738.	13.7	31
129	Assemblies of â€œHingedâ€•Ironâ^'Porphyrins as Potential Oxygen Sensors. Journal of the American Chemical Society, 2000, 122, 1116-1122.	13.7	51
130	Photoluminescent Properties of Cadmium Selenide in Contact with Solutions and Films of Metalloporphyrins. Evidence for Semiconductor-Mediated Adduct Formation of Oxygen with Metalloporphyrins at Room Temperature. Journal of Physical Chemistry B, 1999, 103, 1914-1919.	2.6	15