

Albena Ivanisevic

List of Publications by Year in descending order

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130
papers

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citations

201674

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243625

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130
all docs

130
docs citations

130
times ranked

3533
citing authors

#	ARTICLE	IF	CITATIONS
1	â€œDip-Penâ€•Nanolithography on Semiconductor Surfaces. Journal of the American Chemical Society, 2001, 123, 7887-7889.	13.7	185
2	Gallium nitride is biocompatible and non-toxic before and after functionalization with peptides. Acta Biomaterialia, 2012, 8, 728-733.	8.3	121
3	Molecular Analysis of Blood with Microâ€•Nanoscale Fieldâ€•Effectâ€•Transistor Biosensors. Small, 2011, 7, 1863-1875.	10.0	103
4	Light-emitting diodes as chemical sensors. Nature, 2001, 409, 476-476.	27.8	76
5	DNA-Templated Magnetic Nanowires with Different Compositions:â€• Fabrication and Analysis. Langmuir, 2007, 23, 3886-3890.	3.5	73
6	Enzymatic Clipping of DNA Wires Coated with Magnetic Nanoparticles. Journal of the American Chemical Society, 2005, 127, 3276-3277.	13.7	72
7	Templates for DNA-templated Fe ₃ O ₄ nanoparticles. Biomaterials, 2005, 26, 2749-2757.	11.4	68
8	Electronic Biosensors Based on III-Nitride Semiconductors. Annual Review of Analytical Chemistry, 2015, 8, 149-169.	5.4	66
9	A mesoporous silica nanosphere-based drug delivery system using an electrically conducting polymer. Nanotechnology, 2009, 20, 275102.	2.6	64
10	Inorganic material coatings and their effect on cytotoxicity. Chemical Society Reviews, 2012, 41, 2052-2060.	38.1	61
11	Assemblies of â€œHingedâ€•Ironâ€•Porphyrins as Potential Oxygen Sensors. Journal of the American Chemical Society, 2000, 122, 1116-1122.	13.7	51
12	SiO _x Surfaces with Lithographic Features Composed of a TAT Peptide. Journal of Physical Chemistry B, 2004, 108, 15223-15228.	2.6	49
13	Taking charge of biomolecules. Nature Nanotechnology, 2007, 2, 596-597.	31.5	46
14	Aqueous Stability of Ga- and N-Polar Gallium Nitride. Langmuir, 2013, 29, 216-220.	3.5	46
15	Site-Directed Exchange Studies with Combinatorial Libraries of Nanostructures. Journal of the American Chemical Society, 2002, 124, 11997-12001.	13.7	41
16	Functional silica nanoparticleâ€•mediated neuronal membrane sealing following traumatic spinal cord injury. Journal of Neuroscience Research, 2010, 88, 1433-1444.	2.9	40
17	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
18	Covalent attachment of a peptide to the surface of gallium nitride. Surface Science, 2011, 605, 1466-1475.	1.9	36

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19	Collagen-Binding Peptidoglycans: A Biomimetic Approach to Modulate Collagen Fibrillogenesis for Tissue Engineering Applications. <i>Tissue Engineering - Part A</i> , 2009, 15, 2991-2999.	3.1	35
20	Repairing the Damaged Spinal Cord and Brain with Nanomedicine. <i>Small</i> , 2008, 4, 1676-1681.	10.0	34
21	Magnetotransport of One-Dimensional Chains of CoFe ₂ O ₄ Nanoparticles Ordered along DNA. <i>Journal of Physical Chemistry C</i> , 2008, 112, 3191-3193.	3.1	33
22	Examining MRI Contrast in Three-Dimensional Cell Culture Phantoms with DNA-Templated Nanoparticle Chains. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 1282-1288.	8.0	33
23	Covalent Attachment of TAT Peptides and Thiolated Alkyl Molecules on GaAs Surfaces. <i>Journal of Physical Chemistry B</i> , 2005, 109, 12731-12737.	2.6	32
24	Photoluminescent Properties of Cadmium Selenide in Contact with Solutions and Films of Metalloporphyrins: Nitric Oxide Sensing and Evidence for the Aversion of an Analyte to a Buried Semiconductor/Film Interface. <i>Journal of the American Chemical Society</i> , 2000, 122, 3731-3738.	13.7	31
25	Persistent Photoconductivity, Nanoscale Topography, and Chemical Functionalization Can Collectively Influence the Behavior of PC12 Cells on Wide Bandgap Semiconductor Surfaces. <i>Small</i> , 2017, 13, 1700481.	10.0	29
26	Dip-Pen Nanolithography of Bioactive Peptides on Collagen-Terminated Retinal Membrane. <i>Advanced Materials</i> , 2008, 20, 3678-3681.	21.0	28
27	Assessment of the Passivation Capabilities of Two Different Covalent Chemical Modifications on GaP(100). <i>Langmuir</i> , 2010, 26, 8141-8146.	3.5	28
28	Circular Dichroism Study of the Mechanism of Formation of DNA Templated Nanowires. <i>ChemPhysChem</i> , 2008, 9, 2203-2206.	2.1	27
29	Quantitative Evaluation of Covalently Bound Molecules on GaP (100) Surfaces. <i>Journal of Physical Chemistry C</i> , 2008, 112, 2147-2155.	3.1	27
30	Serial and Parallel Dip-Pen Nanolithography Using a Colloidal Probe Tip. <i>Journal of the American Chemical Society</i> , 2010, 132, 4532-4533.	13.7	27
31	In Situ Chemical Functionalization of Gallium Nitride with Phosphonic Acid Derivatives during Etching. <i>Langmuir</i> , 2014, 30, 2038-2046.	3.5	27
32	Cell Behavior on Gallium Nitride Surfaces: Peptide Affinity Attachment versus Covalent Functionalization. <i>Langmuir</i> , 2013, 29, 8377-8384.	3.5	25
33	Modified surface chemistry, potential, and optical properties of polar gallium nitride via long chained phosphonic acids. <i>Applied Surface Science</i> , 2015, 327, 498-503.	6.1	25
34	Peptides on GaAs Surfaces: A Comparison between Features Generated by Microcontact Printing and Dip-Pen Nanolithography. <i>Langmuir</i> , 2006, 22, 8670-8674.	3.5	24
35	Surface topography and chemistry shape cellular behavior on wide band-gap semiconductors. <i>Acta Biomaterialia</i> , 2014, 10, 2455-2462.	8.3	24
36	Olefin metathesis reaction on GaN (0001) surfaces. <i>Applied Surface Science</i> , 2011, 257, 4625-4632.	6.1	23

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37	Amphiphilic silicones prepared from branched PEO-silanes with siloxane tethers. <i>Journal of Polymer Science Part A</i> , 2010, 48, 4108-4119.	2.3	22
38	Tuning the biocompatibility of aluminum nitride. <i>Materials Letters</i> , 2017, 189, 1-4.	2.6	22
39	Redox-Controlled Orthogonal Assembly of Charged Nanostructures. <i>Journal of the American Chemical Society</i> , 2001, 123, 12424-12425.	13.7	21
40	Formation and Characterization of Homogeneous and Mixed Self-Assembled Monolayers of Peptides and Alkanethiols on Indium Phosphide Surfaces. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3710-3718.	3.1	21
41	Collagen-Binding Peptide Interaction with Retinal Tissue Surfaces. <i>Langmuir</i> , 2008, 24, 1591-1594.	3.5	21
42	Properties of Polyelectrolyte Templates Generated by Dip-Pen Nanolithography and Microcontact Printing. <i>Chemistry of Materials</i> , 2004, 16, 5216-5219.	6.7	20
43	A review of in situ surface functionalization of gallium nitride via beaker wet chemistry. <i>Journal of Materials Research</i> , 2015, 30, 2859-2870.	2.6	20
44	Engineering the Cell-Semiconductor Interface: A Materials Modification Approach using II-VI and III-V Semiconductor Materials. <i>Small</i> , 2015, 11, 768-780.	10.0	20
45	Noninvasive Stimulation of Neurotypic Cells Using Persistent Photoconductivity of Gallium Nitride. <i>ACS Omega</i> , 2018, 3, 615-621.	3.5	20
46	Encapsulated cells: an atomic force microscopy study. <i>Biomaterials</i> , 2004, 25, 3655-3662.	11.4	19
47	Fabrication of positively and negatively charged polyelectrolyte structures by dip-pen nanolithography. <i>Journal of Materials Chemistry</i> , 2005, 15, 649.	6.7	19
48	Gold-iron oxide nanoparticle chains scaffolded on DNA as potential magnetic resonance imaging agents. <i>Journal of Materials Chemistry</i> , 2011, 21, 939-943.	6.7	18
49	Wet-Chemical Passivation of InAs: Toward Surfaces with High Stability and Low Toxicity. <i>Accounts of Chemical Research</i> , 2012, 45, 1451-1459.	15.6	18
50	Ligation of Nanoparticle Coated DNA Cleaved with Restriction Enzymes. <i>Chemistry of Materials</i> , 2007, 19, 3586-3588.	6.7	17
51	Characterization of amino acid adlayers on InAs surfaces using X-ray photoelectron spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2009, 172, 47-53.	1.7	17
52	Characterizing proton relaxation times for metallic and magnetic layer-by-layer-coated, DNA-templated nanoparticle chains. <i>Nanotechnology</i> , 2010, 21, 245103.	2.6	17
53	Adsorption and adhesion of common serum proteins to nanotextured gallium nitride. <i>Nanoscale</i> , 2015, 7, 2360-2365.	5.6	17
54	Surface Characterization of Gallium Nitride Modified with Peptides before and after Exposure to Ionizing Radiation in Solution. <i>Langmuir</i> , 2014, 30, 15477-15485.	3.5	16

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55	Comparison of the Stability of Functionalized GaN and GaP. <i>ChemPhysChem</i> , 2015, 16, 1687-1694.	2.1	16
56	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. <i>Journal of Physical Chemistry B</i> , 1999, 103, 1914-1919.	2.6	15
57	Linker-Enhanced Binding of Metalloporphyrins to Cadmium Selenide and Implications for Oxygen Detection. <i>Langmuir</i> , 2000, 16, 7852-7858.	3.5	15
58	Characterization of Peptide Adsorption on InAs Using X-ray Photoelectron Spectroscopy. <i>Langmuir</i> , 2011, 27, 3774-3782.	3.5	15
59	Nanoscale topography, semiconductor polarity and surface functionalization: additive and cooperative effects on PC12 cell behavior. <i>RSC Advances</i> , 2016, 6, 97873-97881.	3.6	15
60	Mixed Adlayer of Alkanethiol and Peptide on GaAs(100): Quantitative Characterization by X-ray Photoelectron Spectroscopy. <i>Langmuir</i> , 2008, 24, 3164-3170.	3.5	14
61	Transverse Relaxivity Changes after Layer-by-Layer Encapsulation of Multicomponent DNA Templated Nanostructures. <i>Journal of Physical Chemistry C</i> , 2010, 114, 22508-22513.	3.1	14
62	Neurotypic cell attachment and growth on III-nitride lateral polarity structures. <i>Materials Science and Engineering C</i> , 2016, 58, 1194-1198.	7.3	14
63	Elastomeric Nanoparticle Composites Covalently Bound to Al ₂ O ₃ /GaAs Surfaces. <i>Langmuir</i> , 2007, 23, 9472-9480.	3.5	13
64	Modification of native collagen with cell adhesive peptide to promote RPE cell attachment on Bruch's membrane. <i>Biotechnology and Bioengineering</i> , 2009, 102, 1723-1729.	3.3	13
65	Study of the Morphological and Adhesion Properties of Collagen Fibers in the Bruch's Membrane. <i>Journal of Physical Chemistry B</i> , 2005, 109, 19052-19055.	2.6	12
66	In vitro Cytotoxic Evaluation of Metallic and Magnetic DNA-Templated Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2010, 2, 1407-1413.	8.0	12
67	Surface modifications on InAs decrease indium and arsenic leaching under physiological conditions. <i>Applied Surface Science</i> , 2012, 261, 842-850.	6.1	12
68	Patterning of Polypeptides on a Collagen-Terminated Tissue Surface. <i>Journal of Physical Chemistry C</i> , 2007, 111, 11676-11681.	3.1	11
69	Atomic Force Microscopy Investigation of Vocal Fold Collagen. <i>Laryngoscope</i> , 2007, 117, 1876-1881.	2.0	11
70	Adsorption of amino acids on indium arsenide (100) surfaces: Assessment of passivation capabilities. <i>Surface Science</i> , 2009, 603, 907-911.	1.9	11
71	Biomolecular Gradients via Semiconductor Gradients: Characterization of Amino Acid Adsorption to In _x Ga _{1-x} N Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 7236-7243.	8.0	11
72	Characterization of collagen fibers in Bruch's membrane using chemical force microscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2006, 386, 652-657.	3.7	10

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73	In vitro assessment of the biocompatibility of chemically modified GaAs surfaces. <i>Nanobiotechnology</i> , 2006, 2, 51-59.	1.2	10
74	DNA Immobilization on GaP(100) Investigated by Kelvin Probe Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15486-15490.	3.1	10
75	Materials characterization and mechanobiology of the eye. <i>Materials Science and Engineering C</i> , 2013, 33, 1867-1875.	7.3	10
76	Passivation of semipolar (10-1-1) GaN with different organic adsorbates. <i>Materials Letters</i> , 2019, 236, 201-204.	2.6	10
77	Mapping the Interaction Forces between TAR RNA and TAT Peptides on GaAs Surfaces Using Chemical Force Microscopy. <i>Langmuir</i> , 2006, 22, 1768-1774.	3.5	9
78	Comparison between Patterns Generated by Microcontact Printing and Dip-Pen Nanolithography on InP Surfaces. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17989-17992.	3.1	9
79	Fabrication of ordered metallic and magnetic heterostructured DNA-Nanoparticle hybrids. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 63, 296-300.	5.0	9
80	Quantitative Analysis of the Functionalization of Gallium Phosphide With Organic Azides. <i>Scanning</i> , 2012, 34, 332-340.	1.5	9
81	In situ and ex situ functionalization of nanostructured gallium oxyhydroxide with a porphyrin dye. <i>Scanning</i> , 2016, 38, 671-683.	1.5	9
82	Cantilever-Based Sensor for the Detection of Different Chromophore Isomers. <i>Analytical Chemistry</i> , 2007, 79, 4702-4708.	6.5	8
83	Molecular recognition of chromophore molecules to amine terminated surfaces. <i>Applied Surface Science</i> , 2007, 253, 4176-4181.	6.1	8
84	Circular dichroism study of enzymatic manipulation on magnetic and metallic DNA template nanowires. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 67, 279-283.	5.0	8
85	Mechanism of Proton Relaxation for Enzyme-Manipulated, Multicomponent Gold-Magnetic Nanoparticle Chains. <i>ChemPhysChem</i> , 2010, 11, 3664-3672.	2.1	8
86	Adsorption of Mixed Peptide/Thiol Adlayers on InAs: Assessment of Different Functionalization Strategies Using X-ray Photoelectron Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14244-14252.	3.1	8
87	Bioelectronics communication: encoding yeast regulatory responses using nanostructured gallium nitride thin films. <i>Nanoscale</i> , 2018, 10, 11506-11516.	5.6	8
88	Dip-Pen nanolithography on SiO ₂ and tissue-derived substrates: comparison with multiple biological inks. <i>Scanning</i> , 2010, 32, 30-34.	1.5	7
89	Detecting DNA methylation through changes in transverse proton relaxation. <i>Analyst</i> , The, 2011, 136, 2441.	3.5	7
90	Spore-Terminated Cantilevers for Chemical Patterning on Complex Architectures. <i>Journal of the American Chemical Society</i> , 2011, 133, 9627-9629.	13.7	7

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91	Morphological Properties of Collagen Fibers in Porcine Lamina Propria. <i>Journal of Voice</i> , 2011, 25, 254-257.	1.5	7
92	Long-term stability assessment of AlGaIn/GaN field effect transistors modified with peptides: Device characteristics vs. surface properties. <i>AIP Advances</i> , 2015, 5, 097102.	1.3	7
93	Variably doped nanostructured gallium nitride surfaces can serve as biointerfaces for neurotypic PC12 cells and alter their behavior. <i>RSC Advances</i> , 2018, 8, 36722-36730.	3.6	7
94	DNA Molecules on GaP (100) Surfaces: Spectroscopic Characterization and Biospecificity Assessment. <i>ChemPhysChem</i> , 2008, 9, 1528-1530.	2.1	6
95	Electrical detection of the biological interaction of a charged peptide via gallium arsenide junction-field-effect transistors. <i>Journal of Applied Physics</i> , 2008, 103, 114510.	2.5	6
96	Quantitative Analysis of Human Internal Limiting Membrane Extracted from Patients with Macular Holes. <i>Langmuir</i> , 2010, 26, 12810-12816.	3.5	6
97	Kelvin Probe Force Microscopy Analysis of the Covalent Functionalization and DNA Modification of Gallium Phosphide Nanorods. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12613-12620.	3.1	6
98	Ga Ion-Enhanced and Particle Shape-Dependent Generation of Reactive Oxygen Species in X-ray-Irradiated Composites. <i>ACS Omega</i> , 2018, 3, 5252-5259.	3.5	6
99	Tuning Microbial Activity via Programmatic Alteration of Cell/Substrate Interfaces. <i>Advanced Materials</i> , 2021, 33, e2004655.	21.0	6
100	Chromophore binding to in vitro engineered bio-mimetic surfaces. <i>Applied Surface Science</i> , 2005, 243, 7-10.	6.1	5
101	Structural and adhesion properties of surfaces functionalized with polyelectrolytes and polystyrene particles. <i>Talanta</i> , 2005, 67, 503-506.	5.5	5
102	Aqueous stability of nanostructured aluminum and gallium oxyhydroxide before and after functionalization with lysine. <i>Materials Letters</i> , 2016, 184, 278-281.	2.6	5
103	Interfaces with Tunable Mechanical and Radiosensitizing Properties. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 21956-21961.	8.0	5
104	Bulk and Surface Electronic Properties of Inorganic Materials: Tools to Guide Cellular Behavior. <i>Small Methods</i> , 2018, 2, 1800016.	8.6	5
105	Characterization of <i>Pseudomonas aeruginosa</i> Films on Different Inorganic Surfaces before and after UV Light Exposure. <i>Langmuir</i> , 2018, 34, 10806-10815.	3.5	5
106	Behavior of <i>E. coli</i> with Variable Surface Morphology Changes on Charged Semiconductor Interfaces. <i>ACS Applied Bio Materials</i> , 2019, 2, 4044-4051.	4.6	5
107	Nanostructured Oxides Containing Ga: Materials with Unique Properties for Aqueous-Based Applications. <i>ACS Omega</i> , 2019, 4, 6876-6882.	3.5	5
108	Nanostructured GaOOH modified with reactive yellow, red and blue water-soluble dyes. <i>AIP Advances</i> , 2019, 9, .	1.3	5

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109	Lithography on GaP(100) surfaces. <i>Surface Science</i> , 2008, 602, 1993-1998.	1.9	4
110	Heterostructured DNA templates: A combined magnetic force microscopy and circular dichroism study. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	4
111	In situ functionalization of gallium nitride powder with a porphyrin dye. <i>Journal of Materials Research</i> , 2015, 30, 2910-2918.	2.6	4
112	Modification of the Surface Properties of Al _x Ga _{1-x} N Substrates with Gradient Aluminum Composition Using Wet Chemical Treatments. <i>ACS Omega</i> , 2019, 4, 11760-11769.	3.5	4
113	Characterization of Conformational Adsorbate Changes on a Tissue-Derived Substrate Using Fourier Transform Infrared Spectroscopy. <i>Langmuir</i> , 2010, 26, 18083-18088.	3.5	3
114	Multicomponent DNA-templated Nanoparticle Chains with Controllable Dimension and Composition. <i>Small</i> , 2011, 7, 2021-2026.	10.0	3
115	Parallel Dipen Nanolithography using Spore- and Colloid-terminated Cantilevers. <i>Small</i> , 2012, 8, 3791-3794.	10.0	3
116	Modulated optical properties of nonpolar gallium nitride via surface in-situ functionalization with cysteamine assisted phosphoric acid. <i>Applied Surface Science</i> , 2014, 295, 207-213.	6.1	3
117	Interfacial Properties of Doped Semiconductor Materials Can Alter the Behavior of <i>Pseudomonas aeruginosa</i> Films. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1641-1652.	4.3	3
118	Surface modification of vitreoretinal surgical instruments with layer-by-layer films. <i>Scanning</i> , 2011, 33, 397-401.	1.5	2
119	Gallium containing composites as a tunable material to understand neuronal behavior under variable stiffness and radiation conditions. <i>Materials Science and Engineering C</i> , 2017, 71, 317-321.	7.3	2
120	Modulating the Stress Response of <i>E. coli</i> at GaN Interfaces Using Surface Charge, Surface Chemistry, and Genetic Mutations. <i>ACS Applied Bio Materials</i> , 2020, 3, 7211-7218.	4.6	2
121	HgNO ₃ sensitivity of AlGaIn/GaN field effect transistors functionalized with phytochelating peptides. <i>AIP Advances</i> , 2016, 6, 065105.	1.3	1
122	Photoluminescence changes of III-Nitride lateral polarity structures after chemical functionalization. <i>Materials Research Express</i> , 2016, 3, 125906.	1.6	1
123	Preface to Forum on "Interfaces for Mechanobiology and Mechanochemistry: From 2-D to 3-D Platforms". <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 21847-21847.	8.0	1
124	Stability and Reliability of III-Nitride Based Biosensors. , 2016, , 149-196.		1
125	Synthesis and optical characterization of mixed nanostructured aluminum-gallium oxy-hydroxide. <i>Materials Research Letters</i> , 2017, 5, 124-127.	8.7	1
126	Selective placement of templated DNA nanowires between microstructured electrodes. <i>International Journal of Nanomedicine</i> , 2006, 1, 219-222.	6.7	1

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127	Oxidative Stress Transcriptional Responses of <i>Escherichia coli</i> at GaN Interfaces. ACS Applied Bio Materials, 2020, 3, 9073-9081.	4.6	1
128	Deposition of Triamcinolone Acetonide and Its Effect on Soft Tissue Topography. Advanced Healthcare Materials, 2012, 1, 520-525.	7.6	0
129	Chromophore Binding to In-vitro Engineered Bio-mimetic Surfaces. Materials Research Society Symposia Proceedings, 2003, 774, 7211.	0.1	0
130	Dual restriction enzyme digest of cationic-gold-coated DNA scaffolds. International Journal of Nanomedicine, 2007, 2, 821-5.	6.7	0