

Zoran Jaksic

List of Publications by Year in descending order

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138
papers

853
citations

567144

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all docs

140
docs citations

140
times ranked

761
citing authors

#	ARTICLE	IF	CITATIONS
1	A family of perforated submicrometer core-shell plasmonic particles bio-inspired by leafhopper brochosomes. <i>Optical and Quantum Electronics</i> , 2022, 54, .	1.5	1
2	Optimized Design of a Self-Biased Amplifier for Seizure Detection Supplied by Piezoelectric Nanogenerator: Metaheuristic Algorithms versus ANN-Assisted Goal Attainment Method. <i>Micromachines</i> , 2022, 13, 1104.	1.4	1
3	Modelling of plasmonic biosensor temporal response influenced by competitive adsorption and analyte depletion. <i>Measurement Science and Technology</i> , 2021, 32, 095701.	1.4	2
4	Equilibrium fluctuations in chemical reactions: a viable source of random data (numbers, maps and) T_j ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.2	1
5	AI Assisted Optimization of Unimorph Tapered Cantilever for Piezoelectric Energy Harvesting. , 2021, , .		0
6	Plasmonic Crystals with Conical Perforations as Multipurpose Optical Elements. , 2021, , .		0
7	MEMS resonator mass loading noise model: The case of bimodal adsorbing surface and finite adsorbate amount. <i>Facta Universitatis - Series Electronics and Energetics</i> , 2021, 34, 367-380.	0.6	0
8	Brochosome-Inspired Metal-Containing Particles as Biomimetic Building Blocks for Nanoplasmonics: Conceptual Generalizations. <i>Biomimetics</i> , 2021, 6, 69.	1.5	3
9	Temporal response of biochemical and biological sensors with bimodal surface adsorption from a finite sample. <i>Microsystem Technologies</i> , 2020, 27, 1-7.	1.2	2
10	Monolayer Gas Adsorption on Graphene-Based Materials: Surface Density of Adsorption Sites and Adsorption Capacity. <i>Surfaces</i> , 2020, 3, 423-432.	1.0	4
11	Monolithically Integrated Diffused Silicon Two-Zone Heaters for Silicon-Pyrex Glass Microreactors for Production of Nanoparticles: Heat Exchange Aspects. <i>Micromachines</i> , 2020, 11, 818.	1.4	4
12	Optical field concentrator with low absorption metasurfaces based on planar silicon nanoantennas on silica. <i>Solid State Electronics Letters</i> , 2020, 2, 55-58.	1.0	0
13	Biomimetic Nanomembranes: An Overview. <i>Biomimetics</i> , 2020, 5, 24.	1.5	29
14	Broadband enhancement of devices and microsystems for light harvesting and photocatalysis. <i>Optical and Quantum Electronics</i> , 2020, 52, 1.	1.5	1
15	Electromagnetic simulation of MXene-based plasmonic metamaterials with enhanced optical absorption. <i>Optical and Quantum Electronics</i> , 2020, 52, 1.	1.5	20
16	The time response of plasmonic sensors due to binary adsorption: analytical versus numerical modeling. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	1.1	3
17	Arrays of Bowtie Plasmonic Nanoantennas for Field Enhancement in MOEMS. , 2019, , .		0
18	Reviewing MXenes for Plasmonic Applications: Beyond Graphene. , 2019, , .		2

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19	On Oscillations and Noise in Multicomponent Adsorption: The Nature of Multiple Stationary States. <i>Advances in Mathematical Physics</i> , 2019, 2019, 1-12.	0.4	5
20	Semiconductor-dielectric metasurfaces for low-loss field concentrators in the optical range. , 2019, , .		0
21	Modeling Noise and Stability of Affinity-Based MEMS, NEMS and NOEMS Sensors of Ternary Gas Mixtures. , 2019, , .		0
22	Subwavelength nickel-copper multilayers as an alternative plasmonic material. <i>Optical and Quantum Electronics</i> , 2018, 50, 1.	1.5	3
23	Multiscale in modelling and validation for solar photovoltaics. <i>EPJ Photovoltaics</i> , 2018, 9, 10.	0.8	6
24	Methods of decreasing losses in optical metamaterials. <i>Facta Universitatis - Series Electronics and Energetics</i> , 2018, 31, 501-518.	0.6	1
25	Tamm plasmon modes on semi-infinite metalodielectric superlattices. <i>Scientific Reports</i> , 2017, 7, 3746.	1.6	3
26	Phase integral approach to wave propagation in continuously graded models of flat lenses. , 2017, , .		0
27	Tailorable effective optical response of dual-metal plasmonic crystals. , 2017, , .		0
28	A method enabling simultaneous pressure and temperature measurement using a single piezoresistive MEMS pressure sensor. <i>Measurement Science and Technology</i> , 2016, 27, 125101.	1.4	7
29	Limits to optical chemical sensing fluctuations versus ultimate performance. , 2016, , .		0
30	Nonlocal effects in double fishnet metasurfaces nanostructured at deep subwavelength level as a path toward simultaneous sensing of multiple chemical analytes. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2016, 18, 36-42.	1.0	2
31	Exact analytical solution for fields in a lossy cylindrical structure with hyperbolic tangent gradient index metamaterials. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	1.5	5
32	Field localization control in aperture-based plasmonics by Boolean superposition of primitive forms at deep subwavelength scale. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	1.5	4
33	EXACT ANALYTICAL SOLUTION FOR FIELDS IN A LOSSY CYLINDRICAL STRUCTURE WITH LINEAR GRADIENT INDEX METAMATERIALS. <i>Progress in Electromagnetics Research</i> , 2015, 151, 109-117.	1.6	6
34	Super Unit Cells in Aperture-Based Metamaterials. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-9.	1.5	2
35	A low-loss double-fishnet metamaterial based on transparent conductive oxide. <i>Physica Scripta</i> , 2014, T162, 014048.	1.2	3
36	Adsorption-induced fluctuations and noise in plasmonic metamaterial devices. <i>Physica Scripta</i> , 2014, T162, 014047.	1.2	6

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37	Nanoplasmonic chemical sensors. , 2014, , .		0
38	Lagergren kinetic model and multianalyte detection by plasmonic sensors. , 2014, , .		0
39	Plasmonic sensors in multi-analyte environment: Rate constants and transient analysis. Chemical Engineering Research and Design, 2014, 92, 91-101.	2.7	11
40	Fluctuations in transient response of adsorption-based plasmonic sensors. Sensors and Actuators B: Chemical, 2014, 190, 419-428.	4.0	17
41	Intelligent thermal vacuum sensors based on multipurpose thermopile MEMS chips. Vacuum, 2014, 101, 118-124.	1.6	23
42	Suppression of noise in semiconductor infrared detectors using plasmonics. Journal of Optics (United Kingdom), 2014, 16, 125011.	1.0	7
43	Plasmonic metamaterial with fishnet superlattice for enhanced chemical sensing. , 2014, , .		0
44	Micro and Nanophotonics for Semiconductor Infrared Detectors. , 2014, , .		9
45	Plasmonic enhancement of light trapping in photodetectors. Facta Universitatis - Series Electronics and Energetics, 2014, 27, 183-203.	0.6	2
46	Butterfly scales as bionic templates for complex ordered nanophotonic materials: A pathway to biomimetic plasmonics. Optical Materials, 2013, 35, 1869-1875.	1.7	6
47	Monolayer gas adsorption in plasmonic sensors: Comparative analysis of kinetic models. Russian Journal of Physical Chemistry A, 2013, 87, 2134-2139.	0.1	8
48	Designed surface modes propagating along hyperbolic metamaterials. , 2013, , .		0
49	Exact analytical solution for fields in gradient index metamaterials with different loss factors in negative and positive refractive index segments. Journal of Nanophotonics, 2013, 7, 073086.	0.4	9
50	Gradient-index infrared metamaterials based on metal-dielectric submicrometer pillar arrays. , 2013, , .		0
51	Dyakonons in hyperbolic metamaterials. Photonics Letters of Poland, 2013, 5, .	0.2	3
52	Nanotechnological Enhancement of Infrared Detectors by Plasmon Resonance in Transparent Conductive Oxide Nanoparticles. Strojniski Vestnik/Journal of Mechanical Engineering, 2012, 58, 367-375.	0.6	10
53	Oblique surface waves at an interface between a metalâ€“dielectric superlattice and an isotropic dielectric. Physica Scripta, 2012, T149, 014041.	1.2	19
54	Substantial enlargement of angular existence range for Dyakonov-like surface waves at semi-infinite metal-dielectric superlattice. Journal of Nanophotonics, 2012, 6, 063525.	0.4	17

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55	Lossy gradient index transmission optics with arbitrary periodic permittivity and permeability and constant impedance throughout the structure. <i>Journal of Optics (United Kingdom)</i> , 2012, 14, 065102.	1.0	12
56	Functionalization of plasmonic metamaterials utilizing metal-organic framework thin films. <i>Physica Scripta</i> , 2012, T149, 014051.	1.2	3
57	Field effect transistor based on ions as charge carriers. <i>Sensors and Actuators B: Chemical</i> , 2012, 170, 137-142.	4.0	13
58	Surface waves in plasmonic anisotropic media. , 2012, , .		0
59	Transfer of nanomembranes from solution to a solid frame via reflow of low surface tension liquids. , 2012, , .		0
60	The poissonian nature of adsorption-desorption processes. , 2012, , .		0
61	Analysis of transients in adsorption-desorption at the surface of plasmonic sensors: Nonlinear versus linear approach. , 2012, , .		1
62	Redshifting approach for nanoplasmonic enhancement of semiconductor infrared detectors. , 2012, , .		0
63	Enhancing performance of nanohole-based plasmonic sensors by transparent conductive oxides. , 2012, , .		1
64	Dispersion, diffraction and surface waves in semi-infinite metal-dielectric superlattices. , 2012, , .		1
65	Dyakonov-like surface waves in semi-infinite metal-dielectric lattices. , 2012, , .		0
66	Analytical approach to lossy wave propagation through a graded interface containing negative index material. , 2011, , .		0
67	Bionic (Nano) Membranes. <i>Biological and Medical Physics Series</i> , 2011, , 9-24.	0.3	2
68	Intelligent Thermopile-Based Vacuum Sensor. <i>Procedia Engineering</i> , 2011, 25, 575-578.	1.2	5
69	Nanomembrane-based plasmonics. <i>Journal of Nanophotonics</i> , 2011, 5, 051818.	0.4	16
70	Plasmonic crystal waveguides. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 103, 615-617.	1.1	11
71	Lossy gradient index metamaterial with sinusoidal periodicity of refractive index: case of constant impedance throughout the structure. <i>Journal of Nanophotonics</i> , 2011, 5, 051804.	0.4	15
72	Plasmon-driven nondiffracting surface beaming. , 2011, , .		0

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73	Negative Refractive Index Metasurfaces for Enhanced Biosensing. <i>Materials</i> , 2011, 4, 1-36.	1.3	81
74	Contactless Methods for Characterization of Mechanical Properties of Nanomembranes: An Overview of Methods. , 2011, , .		1
75	Adsorption-desorption noise in plasmonic chemical/biological sensors for multiple analyte environment. <i>Microsystem Technologies</i> , 2010, 16, 735-743.	1.2	12
76	A comparative analyze of fundamental noise in cantilever sensors based on lateral and longitudinal displacement: case of thermal infrared detectors. <i>Microsystem Technologies</i> , 2010, 16, 755-763.	1.2	11
77	Field effect transistor based on protons as charge carriers. <i>Procedia Engineering</i> , 2010, 5, 1368-1371.	1.2	0
78	Three-dimensional surface sculpting of freestanding metal-composite nanomembranes. <i>Microelectronic Engineering</i> , 2010, 87, 1487-1490.	1.1	4
79	Plasmon modes on laminated nanomembrane-based waveguides. <i>Journal of Nanophotonics</i> , 2010, 4, 041770.	0.4	10
80	Transparent conductive oxide nanoparticle-based layers for laminar plasmonic devices. , 2010, , .		0
81	Functionalization of Artificial Freestanding Composite Nanomembranes. <i>Materials</i> , 2010, 3, 165-200.	1.3	33
82	Design of symmetric planar fishnet metamaterials for optical wavelength range. , 2010, , .		0
83	Micromechanical sensors based on lateral and longitudinal displacement of a cantilever sensing element: a comparative performance study. <i>Proceedings of SPIE</i> , 2009, , .	0.8	1
84	Adsorption-desorption noise in plasmonic chemical/biological sensors in multiple analyte environment. <i>Proceedings of SPIE</i> , 2009, , .	0.8	0
85	Performance limits to the operation of nanoplasmonic chemical sensors: noise-equivalent refractive index and detectivity. <i>Journal of Nanophotonics</i> , 2009, 3, 031770.	0.4	19
86	Simple and reliable technology for manufacturing metal-composite nanomembranes with giant aspect ratio. <i>Microelectronic Engineering</i> , 2009, 86, 906-909.	1.1	17
87	Exact analytical treatment of the graded interfaces between positive and negative refractive index media. , 2009, , .		1
88	Fishnet-Based Metamaterials: Spectral Tuning Through Adsorption Mechanism. <i>Acta Physica Polonica A</i> , 2009, 116, 625-627.	0.2	8
89	Vacuum Fluctuations in Optical Metamaterials Containing Nonlinear Dielectrics. <i>Acta Physica Polonica A</i> , 2009, 116, 628-630.	0.2	1
90	Thermal radiation antennas made of multilayer structures containing negative index metamaterials. <i>Proceedings of SPIE</i> , 2008, , .	0.8	5

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91	Metal-dielectric photonic crystal for the enhancement of solar-blind ultraviolet silicon photodiodes. , 2008, , .		1
92	A consideration of optical noise figures of adsorption-based nanophotonic sensors. , 2008, , .		0
93	Metal nanowire arrays with ultralow or negative effective permittivity for adsorption-based chemical sensing. , 2008, , .		0
94	A consideration of the use of metamaterials for sensing applications: field fluctuations and ultimate performance. Journal of Optics, 2007, 9, S377-S384.	1.5	60
95	Transmission Spectra of Thue-Morse Multilayers Containing Negative Index Metamaterials. Acta Physica Polonica A, 2007, 112, 1049-1054.	0.2	5
96	Surface Plasmon-Polariton Assisted Metal-Dielectric Multilayers as Passband Filters for Ultraviolet Range. Acta Physica Polonica A, 2007, 112, 953-958.	0.2	4
97	A simplified analytical approach to calculation of the electromagnetic behavior of left-handed metamaterials with a graded refractive index profile. Science of Sintering, 2007, 39, 185-191.	0.5	3
98	Scanning Probe-Shaped Nanohole Arrays with Extraordinary Optical Transmission as Platform for Enhanced Surface Plasmon-Based Biosensing. , 2006, , .		1
99	Emittance and absorptance tailoring by negative refractive index metamaterial-based Cantor multilayers. Journal of Optics, 2006, 8, 355-362.	1.5	32
100	Fabrication-induced disorder in structures for nanophotonics. Microelectronic Engineering, 2006, 83, 1792-1797.	1.1	10
101	Nanofabrication of negative refractive index metasurfaces. Microelectronic Engineering, 2006, 83, 1786-1791.	1.1	6
102	Subwavelength hole arrays with nanoapertures fabricated by scanning probe nanolithography. Science of Sintering, 2006, 38, 117-123.	0.5	2
103	Nanofabrication of planar split ring resonators for negative refractive index metamaterials in the infrared range. Journal of the Serbian Chemical Society, 2006, 71, 695-703.	0.4	1
104	Modification of thermal radiation by periodical structures containing negative refractive index metamaterials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 342, 497-503.	0.9	20
105	Silver- ϵ -silica transparent metal structures as bandpass filters for the ultraviolet range. Journal of Optics, 2005, 7, 51-55.	1.5	49
106	Cavity Enhancement of Auger-Suppressed Detectors: A Way to Background-Limited Room-Temperature Operation in $3\mu\text{m}$ Range. IEEE Journal of Selected Topics in Quantum Electronics, 2004, 10, 771-776.	1.9	11
107	Photonic crystal enhancement of auger-suppressed infrared photodetectors. AIP Conference Proceedings, 2001, , .	0.3	0
108	Optimised high-frequency performance of Auger-suppressed magnetoconcentration photoconductors. Microelectronics Journal, 2000, 31, 981-990.	1.1	4

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109	Enhancement of radiative lifetime in semiconductors using photonic crystals. Infrared Physics and Technology, 1999, 40, 25-32.	1.3	10
110	Composition profiles versus growth pressure and temperature in epitaxial HgZnTe layers. Physica Status Solidi A, 1995, 152, 451-459.	1.7	0
111	Erratum to "A simple approximative method for determination of Auger 1 lifetime in degenerate narrow gap semiconductors". Infrared Physics and Technology, 1995, 36, 819.	1.3	0
112	Composition profiles of (Hg,Cd)Te liquid phase epitaxy layers grown from Te-rich solution. Journal of Crystal Growth, 1994, 143, 176-183.	0.7	3
113	Some theoretical and technological aspects of uncooled HgCdTe detectors: a review. Microelectronics Journal, 1994, 25, 99-114.	1.1	12
114	Spectral characteristics of high temperature IR photodetectors with electromagnetic carrier depletion. Infrared Physics and Technology, 1994, 35, 585-591.	1.3	1
115	A simple approximative method for determination of Auger 1 lifetime in degenerate narrow gap semiconductors. Infrared Physics, 1993, 34, 601-605.	0.5	2
116	Auger generation suppression in narrow-gap semiconductors using the magnetoconcentration effect. Journal of Applied Physics, 1992, 71, 5706-5708.	1.1	11
117	Isothermal vapor phase epitaxy of (Hg,Cd) Te from Te-rich Hg _{1-x} Te _y source. Journal of Crystal Growth, 1991, 108, 710-718.	0.7	7
118	Some peculiarities of (Hg, Cd) Te liquid-phase epitaxial growth in a semi-closed, two-zone system. Journal of Materials Science: Materials in Electronics, 1991, 2, 63-71.	1.1	4
119	Local growth of HgCdTe layers by isothermal vapour phase epitaxy. Electronics Letters, 1990, 26, 1005.	0.5	3
120	IR photodetector with exclusion effect and self-filtering n+ layer. Electronics Letters, 1990, 26, 929.	0.5	2
121	Back side reflection influence on quantum efficiency of photovoltaic devices. Electronics Letters, 1988, 24, 1100.	0.5	7
122	Ambient temperature HgCdTe photoconductor can achieve detectivity higher than 10^6 cm Hz ^{1/2} /W at 10.6 μ m. Electronics Letters, 1988, 24, 1590.	0.5	10
123	Modeling of composition profiles of mercury cadmium telluride liquid phase epitaxial double heterostructures. , 0, , .		0
124	Simple approximation for absorption coefficient in degenerate HgCdTe. , 0, , .		5
125	Dispersion of refractive index in degenerate mercury cadmium telluride. , 0, , .		2
126	Transient response of HgCdTe Auger-suppressed magnetoconcentration photoconductors. , 0, , .		0

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127	Analysis of radiation absorptance in silicon ultraviolet detector. , 0, , .		0
128	Simple quasi-3D photonic crystal planar optical waveguides. , 0, , .		0
129	A consideration of fabrication-induced imperfections in photonic crystals for optical frequencies. , 0, , .		0
130	Ambient-temperature operation of nonequilibrium magnetoconcentration infrared detectors in InSb and HgCdTe. , 0, , .		0
131	Extraction photodiodes with auger suppression for all-weather free-space optical communication. , 0, , .		2
132	Light modulation utilizing photonic crystal-based photoelastic elements with dual built-in defect. , 0, , .		2
133	Method of microcantilever deflection measurement utilizing mechanochromic effect in photonic crystals. , 0, , .		0
134	MEMS accelerometer with all-optical readout based on twin-defect photonic crystal waveguide. , 0, , .		3
135	Electromagnetic Structures Containing Negative Refractive Index Metamaterials. , 0, , .		3
136	DBR Active Optical Filters Incorporating Negative Refractive Index Metamaterials. , 0, , .		1
137	A Consideration of Transparent Metal Structures for Subwavelength Diffraction Management. , 0, , .		1
138	Plasmonic waveguides based on synthetic nanomembranes. SPIE Newsroom, 0, , .	0.1	0