Vlad Stolojan

List of Publications by Year
in descending order

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		186265	149698
134	3,610	28	56
papers	citations	h-index	g-index

136	136	136	4995
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Density,sp3fraction, and cross-sectional structure of amorphous carbon films determined by x-ray reflectivity and electron energy-loss spectroscopy. Physical Review B, 2000, 62, 11089-11103.	3.2	506
2	Stress reduction and bond stability during thermal annealing of tetrahedral amorphous carbon. Journal of Applied Physics, 1999, 85, 7191-7197.	2.5	390
3	Large-area synthesis of carbon nanofibres at room temperature. Nature Materials, 2002, 1, 165-168.	27.5	204
4	Hybrid Carbon Nanotube Networks as Efficient Hole Extraction Layers for Organic Photovoltaics. ACS Nano, 2013, 7, 556-565.	14.6	102
5	Nanostructured Copper Phthalocyanine-Sensitized Multiwall Carbon Nanotube Films. Langmuir, 2007, 23, 6424-6430.	3.5	96
6	Density, sp 3 content and internal layering of DLC films by X-ray reflectivity and electron energy loss spectroscopy. Diamond and Related Materials, 2000, 9, 771-776.	3.9	94
7	Structural and optoelectronic properties of C60 rods obtained via a rapid synthesis route. Journal of Materials Chemistry, 2006, 16, 3715.	6.7	94
8	Thermal expansion coefficient of hydrogenated amorphous carbon. Applied Physics Letters, 2003, 83, 3099-3101.	3.3	85
9	Determination of bonding in amorphous carbons by electron energy loss spectroscopy, Raman scattering and X-ray reflectivity. Journal of Non-Crystalline Solids, 2000, 266-269, 765-768.	3.1	81
10	Multi-Functional Carbon Fibre Composites using Carbon Nanotubes as an Alternative to Polymer Sizing. Scientific Reports, 2016, 6, 37334.	3.3	76
11	Highly Stretchable, Directionally Oriented Carbon Nanotube/PDMS Conductive Films with Enhanced Sensitivity as Wearable Strain Sensors. ACS Applied Materials & Interfaces, 2019, 11, 39560-39573.	8.0	75
12	Confined Crystals of the Smallest Phase-Change Material. Nano Letters, 2013, 13, 4020-4027.	9.1	73
13	The Relationship between Reaction Temperature and Carbon Deposition on Nickel Catalysts Based on Al2O3, ZrO2 or SiO2 Supports during the Biogas Dry Reforming Reaction. Catalysts, 2019, 9, 676.	3.5	72
14	Ultrahigh Performance C60 Nanorod Large Area Flexible Photoconductor Devices via Ultralow Organic and Inorganic Photodoping. Scientific Reports, 2015, 4, 5041.	3.3	67
15	Growth of carbon nanotubes at temperatures compatible with integrated circuit technologies. Carbon, 2011, 49, 280-285.	10.3	53
16	Observation of van der Waals Driven Self-Assembly of MoSI Nanowires into a Low-Symmetry Structure Using Aberration-Corrected Electron Microscopy. Advanced Materials, 2007, 19, 543-547.	21.0	42
17	Deposition of carbon nitride films using an electron cyclotron wave resonance plasma source. Diamond and Related Materials, 2000, 9, 524-529.	3.9	41
18	Photo-thermal chemical vapor deposition growth of graphene. Carbon, 2012, 50, 668-673.	10.3	40

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19	High-rate low-temperature growth of vertically aligned carbon nanotubes. Nanotechnology, 2010, 21, 505604.	2.6	38
20	High Quality Carbon Nanotubes on Conductive Substrates Grown at Low Temperatures. Advanced Functional Materials, 2015, 25, 4419-4429.	14.9	38
21	Supercapacitor electrode with high charge density based on boron-doped porous carbon derived from covalent organic frameworks. Carbon, 2021, 184, 418-425.	10.3	38
22	Optimizing the oxide support composition in Pr-doped CeO2 towards highly active and selective Ni-based CO2 methanation catalysts. Journal of Energy Chemistry, 2022, 71, 547-561.	12.9	36
23	Controlled Growth-Reversal of Catalytic Carbon Nanotubes under Electron-Beam Irradiation. Nano Letters, 2006, 6, 1837-1841.	9.1	33
24	The Inner Shell Influence on the Electronic Structure of Doubleâ€Walled Carbon Nanotubes. Advanced Materials, 2008, 20, 189-194.	21.0	33
25	Inner-Tube Chirality Determination for Double-Walled Carbon Nanotubes by Scanning Tunneling Microscopy. Nano Letters, 2007, 7, 1232-1239.	9.1	31
26	Highly aligned arrays of super resilient carbon nanotubes by steam purification. Carbon, 2015, 84, 130-137.	10.3	31
27	Development of sizing-free multi-functional carbon fibre nanocomposites. Composites Part A: Applied Science and Manufacturing, 2016, 90, 306-319.	7.6	31
28	Carbon spheres generated in â€˜dusty plasmasâ€™. Carbon, 2005, 43, 704-708.	10.3	30
29	Chemico-physical characterisation and in vivo biocompatibility assessment of DLC-coated coronary stents. Analytical and Bioanalytical Chemistry, 2013, 405, 321-329.	3.7	29
30	Highly photoconductive amorphous carbon nitride films prepared by cyclic nitrogen radical sputtering. Applied Physics Letters, 2004, 85, 2803-2805.	3.3	28
31	Electron energy loss spectroscopy of carbonaceous materials. Thin Solid Films, 2005, 488, 283-290.	1.8	28
32	Biomass preservation in impact melt ejecta. Nature Geoscience, 2013, 6, 1018-1022.	12.9	28
33	Laser implantation of plasmonic nanostructures into glass. Nanoscale, 2013, 5, 1054-1059.	5.6	27
34	Solution processable multi-channel ZnO nanowire field-effect transistors with organic gate dielectric. Nanotechnology, 2013, 24, 405203.	2.6	27
35	Determining the Level and Location of Functional Groups on Few-Layer Graphene and Their Effect on the Mechanical Properties of Nanocomposites. ACS Applied Materials & Interfaces, 2020, 12, 13481-13493.	8.0	27
36	A fast sonochemical approach for the synthesis of solution processable ZnO rods. Journal of Applied Physics, 2008, 104, .	2.5	26

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37	Facile Synthesis of Titania Nanowires via a Hot Filament Method and Conductometric Measurement of Their Response to Hydrogen Sulfide Gas. ACS Applied Materials & Interfaces, 2013, 5, 1197-1205.	8.0	26
38	Reactive Polymorphic Nanoparticles: Preparation via Polymerizationâ€Induced Selfâ€Assembly and Postsynthesis Thiolâ€“‹i›para‹/i›â€Fluoro Core Modification. Macromolecular Rapid Communications, 2019, 40, e1800346.	3.9	26
39	From Stems (and Stars) to Roses: Shape-Controlled Synthesis of Zinc Oxide Crystals. Crystal Growth and Design, 2009, 9, 3432-3437.	3.0	25
40	Simultaneous Tunable Selection and Self-Assembly of Si Nanowires from Heterogeneous Feedstock. ACS Nano, 2016, 10, 4384-4394.	14.6	25
41	Raman, EELS and XPS studies of maghemite decorated multi-walled carbon nanotubes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 121, 715-718.	3.9	24
42	Branched carbon nanofiber network synthesis at room temperature using radio frequency supported microwave plasmas. Journal of Applied Physics, 2004, 96, 3443-3446.	2.5	22
43	Efficient Coupling of Optical Energy for Rapid Catalyzed Nanomaterial Growth: High-Quality Carbon Nanotube Synthesis at Low Substrate Temperatures. ACS Applied Materials & Interfaces, 2013, 5, 3861-3866.	8.0	22
44	Diamond-like carbon thin films for high-temperature applications prepared by filtered pulsed laser deposition. Vacuum, 2005, 80, 163-167.	3.5	21
45	Electrochemical supercapacitors based on 3D nanocomposites of reduced graphene oxide/carbon nanotube and ZnS. Journal of Alloys and Compounds, 2020, 836, 155408.	5.5	21
46	The fabrication of aspherical microlenses using focused ion-beam techniques. Micron, 2014, 57, 56-66.	2.2	20
47	Towards type-selective carbon nanotube growth at low substrate temperature via photo-thermal chemical vapour deposition. Carbon, 2015, 84, 409-418.	10.3	20
48	Carbon Nanotube Interconnects Realized through Functionalization and Sintered Silver Attachment. ACS Applied Materials & Interfaces, 2016, 8, 5563-5570.	8.0	20
49	Solutionâ€Processed Neodymium Oxide/ZnO Thinâ€Film Transistors with Electron Mobility in Excess of 65 cm V‹sup›â^'1‹/sup› s‹sup›â^'1‹/sup›. Advanced Electronic Materials, 2017, 3, 1700025.	5.1	20
50	Electron field emission properties of Co quantum dots in SiO2 matrix synthesised by ion implantation. Ultramicroscopy, 2007, 107, 819-824.	1.9	19
51	Electrical conduction mechanism in laser deposited amorphous carbon. Thin Solid Films, 2007, 516, 257-261.	1.8	19
52	Pulsed laser deposited tetrahedral amorphous carbon with high sp3 fractions and low optical bandgaps. Journal of Applied Physics, 2009, 105, 073521.	2.5	18
53	Probing of polymer to carbon nanotube surface interactions within highly aligned electrospun nanofibers for advanced composites. Carbon, 2018, 138, 207-214.	10.3	18
54	Electron field-emission properties of Agâ€“SiO[sub 2] nanocomposite layers. Journal of Vacuum Science & Technology B, 2006, 24, 958.	1.3	17

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55	The effect of silane incorporation on a metal adhesive interface: A study by electron energy loss spectroscopy. Micron, 2010, 41, 130-134.	2.2	17
56	Negative differential conductance observed in electron field emission from band gap modulated amorphous-carbon nanolayers. Applied Physics Letters, 2006, 89, 193103.	3.3	16
57	High concentration Mn ion implantation in Si. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1623-1625.	1.4	16
58	Growth and characterization of ceria thin films and Ce-doped Î³-Al₂O₃nanowires using solâ€“gel techniques. Nanotechnology, 2010, 21, 465606.	2.6	16
59	Sourceâ€Gated Transistors Based on Solution Processed Silicon Nanowires for Low Power Applications. Advanced Electronic Materials, 2017, 3, 1600256.	5.1	16
60	Synthesis and Electrochemical Properties of Bi2MoO6/Carbon Anode for Lithium-Ion Battery Application. Materials, 2020, 13, 1132.	2.9	16
61	Bandgap enhancement of layered nanocrystalline silicon from excimer laser crystallization. Nanotechnology, 2006, 17, 5412-5416.	2.6	15
62	Study of the current stressing in nanomanipulated three-dimensional carbon nanotube structures. Applied Physics Letters, 2005, 87, 033102.	3.3	14
63	Electronic state modification in laser deposited amorphous carbon films by the inclusion of nitrogen. Journal of Applied Physics, 2008, 104, 063701.	2.5	14
64	Adsorbent 2D and 3D carbon matrices with protected magnetic iron nanoparticles. Nanoscale, 2015, 7, 17441-17449.	5.6	14
65	Physicochemical characterisation of reduced graphene oxide for conductive thin films. RSC Advances, 2018, 8, 37540-37549.	3.6	14
66	Probing the band structure of hydrogen-free amorphous carbon and the effect of nitrogen incorporation. Carbon, 2011, 49, 5229-5238.	10.3	13
67	The role of the gas species on the formation of carbon nanotubes during thermal chemical vapour deposition. Nanotechnology, 2008, 19, 445605.	2.6	12
68	Decoration of multiwalled carbon nanotubes with protected iron nanoparticles. Carbon, 2015, 84, 47-55.	10.3	12
69	Large area uniform electrospun polymer nanofibres by balancing of the electrostatic field. Reactive and Functional Polymers, 2018, 129, 89-94.	4.1	12
70	Micro-Centrifugal Technique for Improved Assessment and Optimization of Nanomaterial Dispersions: The Case for Carbon Nanotubes. ACS Applied Nano Materials, 2018, 1, 6217-6225.	5.0	12
71	Formamidinium Lead Halide Perovskite Nanocomposite Scintillators. Nanomaterials, 2022, 12, 2141.	4.1	12
72	Towards manufacturing high uniformity polysilicon circuits through TFT contact barrier engineering. Scientific Reports, 2018, 8, 17558.	3.3	11

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73	Textileâ€Compatible, Electroactive Polyvinylidene Fluoride Electrospun Mats for Energy Harvesting. Macromolecular Chemistry and Physics, 2019, 220, 1900364.	2.2	11
74	Synthesis of linear ZnO structures by a thermal decomposition method and their characterisation. Journal of Materials Science, 2012, 47, 1893-1901.	3.7	10
75	Rapid determination of nanowires electrical properties using a dielectrophoresis-well based system. Applied Physics Letters, 2017, 110, .	3.3	10
76	Suppression of Selfâ€Discharge in Aqueous Supercapacitor Devices Incorporating Highly Polar Nanofiber Separators. Energy and Environmental Materials, 2023, 6, .	12.8	10
77	Nanostructural studies of PVD TiAlB coatings. Surface and Interface Analysis, 2006, 38, 731-735.	1.8	9
78	Microstructure Analyses of Metal-Filled Carbon Nanotubes Synthesized by Microwave Plasma-Enhanced Chemical Vapor Deposition. IEEE Nanotechnology Magazine, 2006, 5, 485-490.	2.0	8
79	Structural characterization of hard a-C:H films as a function of the methane pressure. Diamond and Related Materials, 2002, 11, 980-984.	3.9	7
80	Reversible increase of photocurrents in excimer laser-crystallized silicon solar cells. Solar Energy Materials and Solar Cells, 2008, 92, 1378-1381.	6.2	7
81	The growth of silica and silica-clad nanowires using a solid-state reaction mechanism on Ti, Ni and SiO₂layers. Nanotechnology, 2010, 21, 295603.	2.6	7
82	Spontaneous Emergence of Long-Range Shape Symmetry. Nano Letters, 2011, 11, 160-163.	9.1	7
83	Catalysing the production of multiple arm carbon octopi nanostructures. Carbon, 2012, 50, 2141-2146.	10.3	7
84	X-ray micro-computed tomography as a non-destructive tool for imaging the uptake of metal nanoparticles by graphene-based 3D carbon structures. Nanoscale, 2019, 11, 14734-14741.	5.6	7
85	Zincâ€Based Metalâ€“Organic Frameworks for Highâ€Performance Supercapacitor Electrodes: Mechanism Underlying Pore Generation. Energy and Environmental Materials, 2023, 6, .	12.8	7
86	Dendrimer assisted catalytic growth of mats of multiwall carbon nanofibers. Carbon, 2005, 43, 2229-2231.	10.3	6
87	Deployment of titanium thermal barrier for low-temperature carbon nanotube growth. Applied Physics Letters, 2005, 87, 253115.	3.3	6
88	Dielectric properties of WS2-coated multiwalled carbon nanotubes studied by energy-loss spectroscopic profiling. Applied Physics Letters, 2005, 86, 063112.	3.3	6
89	Interface Passivation and Trap Reduction via a Solution-Based Method for Near-Zero Hysteresis Nanowire Field-Effect Transistors. ACS Applied Materials & Interfaces, 2015, 7, 22115-22120.	8.0	6
90	Damage effects in Pyrex by CF4 reactive ion etching in dual RF-microwave plasmas. Micro and Nano Letters, 2006, 1, 103.	1.3	6

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91	Energy loss spectroscopic profiling across linear interfaces: The example of amorphous carbon superlattices. Ultramicroscopy, 2006, 106, 346-355.	1.9	5
92	Failure mechanisms in adhesively bonded aluminium: an XPS and PEELS study. Surface and Interface Analysis, 2008, 40, 128-131.	1.8	5
93	Top-Down Heating for Low Substrate Temperature Synthesis of Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 3952-3958.	0.9	5
94	Carbon nanotube micro-contactors on ohmic substrates for on-chip microelectromechanical probing applications at wafer level. Carbon, 2019, 150, 117-127.	10.3	5
95	Field electron emission measurements as a complementary technique to assess carbon nanotube quality. Applied Physics Letters, 2020, 116, .	3.3	5
96	Effect of Surfactants on the Thermoelectric Performance of Doubleâ€Walled Carbon Nanotubes. Energy and Environmental Materials, 2023, 6, .	12.8	5
97	Phonon transport probed at carbon nanotube yarn/sheet boundaries by ultrafast structural dynamics. Carbon, 2020, 170, 165-173.	10.3	5
98	The electron field emission properties of ion beam synthesised metal-dielectric nanocomposite layers on silicon substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 124-125, 453-457.	3.5	4
99	Enhancement of phosphorus activation in vacancy engineered thin silicon-on-insulator substrates. Journal of Applied Physics, 2009, 106, .	2.5	4
100	Semiconductor Quantum Well Lasers With a Temperature-Insensitive Threshold Current. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 177-182.	2.9	4
101	Delivering interlaminar reinforcement in composites through electrospun nanofibres. Advanced Manufacturing: Polymer and Composites Science, 2019, 5, 155-171.	0.4	4
102	Low-Cost Catalyst Ink for Simple Patterning and Growth of High-Quality Single- and Double-Walled Carbon Nanotubes. ACS Applied Materials & Interfaces, 2020, 12, 11898-11906.	8.0	4
103	Subnanometer-resolved measurement of the tunneling effective mass using bulk plasmons. Applied Physics Letters, 2006, 88, 122109.	3.3	3
104	Carbon nanotube field effect transistor measurements in vacuum. , 2010, , .		3
105	Characterisation of gold nanoparticles and rods using high angle annular dark field imaging. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	3
106	Charge Funneling through Metal Electrode Structuring for Highâ€Efficiency Gains in Polymer Solar Cells. Advanced Electronic Materials, 2016, 2, 1600049.	5.1	3
107	Solutionâ€Processed InAs Nanowire Transistors as Microwave Switches. Advanced Electronic Materials, 2019, 5, 1800323.	5.1	3
108	Understanding the bonding mechanisms of organic molecules deposited on graphene for biosensing applications. Journal of Chemical Physics, 2021, 155, 174703.	3.0	3

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109	One-pot rapid low-cost synthesis of Pd-fullerite catalysts. Journal of Materials Chemistry, 2008, 18, 4808.	6.7	2
110	Characterisation of electron-beam deposited tungsten interconnects. Journal of Physics: Conference Series, 2008, 126, 012073.	0.4	2
111	A Route Towards Metal-free Electrical Cables via Carbon Nanotube Wires. Carbon Trends, 2022, 7, 100159.	3.0	2
112	Direct observation and characterisation of the oxide nanostructured interface resulting from organosilane pre-treatment of aluminium. Materials Research Society Symposia Proceedings, 2002, 734, 181.	0.1	1
113	Silver intercalated carbon nanotubes. AIP Conference Proceedings, 2005, , .	0.4	1
114	Quantum effects in band gap-modulated amorphous carbon superlattices. , 2005, , 307-310.		1
115	Growth of tungsten oxide nanowires using simple thermal heating. , 0, , .		1
116	Improving the electron emission properties of ion-beam-synthesized Agâ€“SiO2 nanocomposites by pulsed laser annealing. Journal of Vacuum Science & Technology B, 2008, 26, 860-863.	1.3	1
117	Laser Patterned Polymer/Carbon Nanotubes Composite Electrodes for Flexible Silicon Nanowire Transistors. Journal of Nanoscience and Nanotechnology, 2019, 19, 4765-4770.	0.9	1
118	In situ Observation of the Growth of Tungsten Oxide Nanostructures. Springer Proceedings in Physics, 2008, , 277-280.	0.2	1
119	Gas Sensing Properties of Vapour-Deposited Tungsten Oxide Nanostructures. Springer Proceedings in Physics, 2008, , 281-284.	0.2	1
120	Growth kinetics changes of vertically aligned carbon nanostructures synthesised at low substrate temperatures. Materials Research Society Symposia Proceedings, 2004, 858, 192.	0.1	0
121	Ion-Beam-Synthesised Ag-SiO2 Nanocomposite Layers for Electron Field Emission Devices. Materials Research Society Symposia Proceedings, 2005, 908, 1.	0.1	0
122	The electron field emission properties of Ag-SiO/sub 2/ nanocomposite layers. , 0, , .		0
123	Carbon nanotubes and nanostructures grown at below 400Â°C. Materials Research Society Symposia Proceedings, 2005, 901, 1.	0.1	0
124	Microstructure analyses of metal-filled carbon nanotubes synthesized by microwave plasma-enhanced chemical vapour deposition. , 0, , .		0
125	Novel approach to low substrate temperature synthesis of carbon nanotubes. , 0, , .		0
126	Electron Field Emission Properties of Co Quantum Dots in SiO2 Matrix Synthesised by Ion Implantation. , 2006, , .		0

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127	Negative Differential Conductance Observed in Electron Field Emission from Band Gap Modulated A-C Nanolayers. , 2006, , .		0
128	Improving the electron emission properties of ion-beam-synthesized Ag-Si0<inf>2</inf> nanocomposites by pulsed laser annealing. , 2007, , .		0
129	Influences of Hydrogen Gas on Carbon Nanotube Growth. Materials Research Society Symposia Proceedings, 2008, 1081, 1.	0.1	0
130	Engineering the shape of Zinc Oxide crystals via sonochemical or hydrothermal solution-based methods. Materials Research Society Symposia Proceedings, 2008, 1087, 60401.	0.1	0
131	Direct catalytic growth of high-density carbon nanotubes on nanoclusters at low temperatures. , 2010, , .		0
132	Raman analysis of oxide cladded silicon core nanowires grown with solid silicon feed stock. Journal of Nanoparticle Research, 2011, 13, 2697-2703.	1.9	0
133	Electron energy loss line spectral and TEM analysis of heterojunctions. , 2018, , 41-44.		0
134	Rapid determination of nanowire electrical properties using a dielectrophoresis-well based system. Applied Physics Letters, 2017, 110, .	3.3	0