

# Vlad Stolojan

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7725481/publications.pdf>

Version: 2024-02-01

134  
papers

3,610  
citations

185998

28  
h-index

149479

56  
g-index

136  
all docs

136  
docs citations

136  
times ranked

4995  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Surfactants on the Thermoelectric Performance of Double-Walled Carbon Nanotubes. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	5
2	Zinc-Based Metal-Organic Frameworks for High-Performance Supercapacitor Electrodes: Mechanism Underlying Pore Generation. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	7
3	Suppression of Self-Discharge in Aqueous Supercapacitor Devices Incorporating Highly Polar Nanofiber Separators. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	10
4	A Route Towards Metal-free Electrical Cables via Carbon Nanotube Wires. <i>Carbon Trends</i> , 2022, 7, 100159.	1.4	2
5	Optimizing the oxide support composition in Pr-doped CeO <sub>2</sub> towards highly active and selective Ni-based CO <sub>2</sub> methanation catalysts. <i>Journal of Energy Chemistry</i> , 2022, 71, 547-561.	7.1	36
6	Formamidinium Lead Halide Perovskite Nanocomposite Scintillators. <i>Nanomaterials</i> , 2022, 12, 2141.	1.9	12
7	Supercapacitor electrode with high charge density based on boron-doped porous carbon derived from covalent organic frameworks. <i>Carbon</i> , 2021, 184, 418-425.	5.4	38
8	Understanding the bonding mechanisms of organic molecules deposited on graphene for biosensing applications. <i>Journal of Chemical Physics</i> , 2021, 155, 174703.	1.2	3
9	Electrochemical supercapacitors based on 3D nanocomposites of reduced graphene oxide/carbon nanotube and ZnS. <i>Journal of Alloys and Compounds</i> , 2020, 836, 155408.	2.8	21
10	Synthesis and Electrochemical Properties of Bi <sub>2</sub> MoO <sub>6</sub> /Carbon Anode for Lithium-Ion Battery Application. <i>Materials</i> , 2020, 13, 1132.	1.3	16
11	Low-Cost Catalyst Ink for Simple Patterning and Growth of High-Quality Single- and Double-Walled Carbon Nanotubes. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 11898-11906.	4.0	4
12	Determining the Level and Location of Functional Groups on Few-Layer Graphene and Their Effect on the Mechanical Properties of Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 13481-13493.	4.0	27
13	Field electron emission measurements as a complementary technique to assess carbon nanotube quality. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	5
14	Phonon transport probed at carbon nanotube yarn/sheet boundaries by ultrafast structural dynamics. <i>Carbon</i> , 2020, 170, 165-173.	5.4	5
15	Reactive Polymorphic Nanoparticles: Preparation via Polymerization-Induced Self-Assembly and Postsynthesis Thiol-Fluoro Core Modification. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1800346.	2.0	26
16	The Relationship between Reaction Temperature and Carbon Deposition on Nickel Catalysts Based on Al <sub>2</sub> O <sub>3</sub> , ZrO <sub>2</sub> or SiO <sub>2</sub> Supports during the Biogas Dry Reforming Reaction. <i>Catalysts</i> , 2019, 9, 676.	1.6	72
17	X-ray micro-computed tomography as a non-destructive tool for imaging the uptake of metal nanoparticles by graphene-based 3D carbon structures. <i>Nanoscale</i> , 2019, 11, 14734-14741.	2.8	7
18	Delivering interlaminar reinforcement in composites through electrospun nanofibres. <i>Advanced Manufacturing: Polymer and Composites Science</i> , 2019, 5, 155-171.	0.2	4

#	ARTICLE	IF	CITATIONS
19	Highly Stretchable, Directionally Oriented Carbon Nanotube/PDMS Conductive Films with Enhanced Sensitivity as Wearable Strain Sensors. ACS Applied Materials & Interfaces, 2019, 11, 39560-39573.	4.0	75
20	Carbon nanotube micro-contactors on ohmic substrates for on-chip microelectromechanical probing applications at wafer level. Carbon, 2019, 150, 117-127.	5.4	5
21	Laser Patterned Polymer/Carbon Nanotubes Composite Electrodes for Flexible Silicon Nanowire Transistors. Journal of Nanoscience and Nanotechnology, 2019, 19, 4765-4770.	0.9	1
22	Textile-compatible, Electroactive Polyvinylidene Fluoride Electrospun Mats for Energy Harvesting. Macromolecular Chemistry and Physics, 2019, 220, 1900364.	1.1	11
23	Solution-processed InAs Nanowire Transistors as Microwave Switches. Advanced Electronic Materials, 2019, 5, 1800323.	2.6	3
24	Large area uniform electrospun polymer nanofibres by balancing of the electrostatic field. Reactive and Functional Polymers, 2018, 129, 89-94.	2.0	12
25	Physicochemical characterisation of reduced graphene oxide for conductive thin films. RSC Advances, 2018, 8, 37540-37549.	1.7	14
26	Towards manufacturing high uniformity polysilicon circuits through TFT contact barrier engineering. Scientific Reports, 2018, 8, 17558.	1.6	11
27	Micro-Centrifugal Technique for Improved Assessment and Optimization of Nanomaterial Dispersions: The Case for Carbon Nanotubes. ACS Applied Nano Materials, 2018, 1, 6217-6225.	2.4	12
28	Probing of polymer to carbon nanotube surface interactions within highly aligned electrospun nanofibers for advanced composites. Carbon, 2018, 138, 207-214.	5.4	18
29	Electron energy loss line spectral and TEM analysis of heterojunctions. , 2018, , 41-44.		0
30	Solution-processed Neodymium Oxide/ZnO Thin-film Transistors with Electron Mobility in Excess of 65 cm <sup>2</sup> V <sup>-1</sup> s <sup>-1</sup> . Advanced Electronic Materials, 2017, 3, 1700025.	2.6	20
31	Source-gated Transistors Based on Solution Processed Silicon Nanowires for Low Power Applications. Advanced Electronic Materials, 2017, 3, 1600256.	2.6	16
32	Rapid determination of nanowires electrical properties using a dielectrophoresis-well based system. Applied Physics Letters, 2017, 110, .	1.5	10
33	Rapid determination of nanowire electrical properties using a dielectrophoresis-well based system. Applied Physics Letters, 2017, 110, .	1.5	0
34	Development of sizing-free multi-functional carbon fibre nanocomposites. Composites Part A: Applied Science and Manufacturing, 2016, 90, 306-319.	3.8	31
35	Charge Funneling through Metal Electrode Structuring for High-efficiency Gains in Polymer Solar Cells. Advanced Electronic Materials, 2016, 2, 1600049.	2.6	3
36	Multi-Functional Carbon Fibre Composites using Carbon Nanotubes as an Alternative to Polymer Sizing. Scientific Reports, 2016, 6, 37334.	1.6	76

#	ARTICLE	IF	CITATIONS
37	Simultaneous Tunable Selection and Self-Assembly of Si Nanowires from Heterogeneous Feedstock. ACS Nano, 2016, 10, 4384-4394.	7.3	25
38	Carbon Nanotube Interconnects Realized through Functionalization and Sintered Silver Attachment. ACS Applied Materials & Interfaces, 2016, 8, 5563-5570.	4.0	20
39	High Quality Carbon Nanotubes on Conductive Substrates Grown at Low Temperatures. Advanced Functional Materials, 2015, 25, 4419-4429.	7.8	38
40	Semiconductor Quantum Well Lasers With a Temperature-Insensitive Threshold Current. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 177-182.	1.9	4
41	Adsorbent 2D and 3D carbon matrices with protected magnetic iron nanoparticles. Nanoscale, 2015, 7, 17441-17449.	2.8	14
42	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.	4.0	6
43	Towards type-selective carbon nanotube growth at low substrate temperature via photo-thermal chemical vapour deposition. Carbon, 2015, 84, 409-418.	5.4	20
44	Highly aligned arrays of super resilient carbon nanotubes by steam purification. Carbon, 2015, 84, 130-137.	5.4	31
45	Decoration of multiwalled carbon nanotubes with protected iron nanoparticles. Carbon, 2015, 84, 47-55.	5.4	12
46	Ultrahigh Performance C60 Nanorod Large Area Flexible Photoconductor Devices via Ultralow Organic and Inorganic Photodoping. Scientific Reports, 2015, 4, 5041.	1.6	67
47	Raman, EELS and XPS studies of maghemite decorated multi-walled carbon nanotubes. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 121, 715-718.	2.0	24
48	The fabrication of aspherical microlenses using focused ion-beam techniques. Micron, 2014, 57, 56-66.	1.1	20
49	Chemico-physical characterisation and in vivo biocompatibility assessment of DLC-coated coronary stents. Analytical and Bioanalytical Chemistry, 2013, 405, 321-329.	1.9	29
50	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.	4.0	26
51	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.	4.0	22
52	Biomass preservation in impact melt ejecta. Nature Geoscience, 2013, 6, 1018-1022.	5.4	28
53	Laser implantation of plasmonic nanostructures into glass. Nanoscale, 2013, 5, 1054-1059.	2.8	27
54	Hybrid Carbon Nanotube Networks as Efficient Hole Extraction Layers for Organic Photovoltaics. ACS Nano, 2013, 7, 556-565.	7.3	102

#	ARTICLE	IF	CITATIONS
55	Confined Crystals of the Smallest Phase-Change Material. Nano Letters, 2013, 13, 4020-4027.	4.5	73
56	Solution processable multi-channel ZnO nanowire field-effect transistors with organic gate dielectric. Nanotechnology, 2013, 24, 405203.	1.3	27
57	Characterisation of gold nanoparticles and rods using high angle annular dark field imaging. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	3
58	Photo-thermal chemical vapor deposition growth of graphene. Carbon, 2012, 50, 668-673.	5.4	40
59	Catalysing the production of multiple arm carbon octopi nanostructures. Carbon, 2012, 50, 2141-2146.	5.4	7
60	Synthesis of linear ZnO structures by a thermal decomposition method and their characterisation. Journal of Materials Science, 2012, 47, 1893-1901.	1.7	10
61	Spontaneous Emergence of Long-Range Shape Symmetry. Nano Letters, 2011, 11, 160-163.	4.5	7
62	Probing the band structure of hydrogen-free amorphous carbon and the effect of nitrogen incorporation. Carbon, 2011, 49, 5229-5238.	5.4	13
63	Raman analysis of oxide cladded silicon core nanowires grown with solid silicon feed stock. Journal of Nanoparticle Research, 2011, 13, 2697-2703.	0.8	0
64	Growth of carbon nanotubes at temperatures compatible with integrated circuit technologies. Carbon, 2011, 49, 280-285.	5.4	53
65	Top-Down Heating for Low Substrate Temperature Synthesis of Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 3952-3958.	0.9	5
66	The effect of silane incorporation on a metal adhesive interface: A study by electron energy loss spectroscopy. Micron, 2010, 41, 130-134.	1.1	17
67	The growth of silica and silica-clad nanowires using a solid-state reaction mechanism on Ti, Ni and SiO <sub>2</sub> layers. Nanotechnology, 2010, 21, 295603.	1.3	7
68	Growth and characterization of ceria thin films and Ce-doped Al <sub>2</sub> O <sub>3</sub> nanowires using sol-gel techniques. Nanotechnology, 2010, 21, 465606.	1.3	16
69	Carbon nanotube field effect transistor measurements in vacuum. , 2010, , .		3
70	High-rate low-temperature growth of vertically aligned carbon nanotubes. Nanotechnology, 2010, 21, 505604.	1.3	38
71	Direct catalytic growth of high-density carbon nanotubes on nanoclusters at low temperatures. , 2010, , .		0
72	Pulsed laser deposited tetrahedral amorphous carbon with high sp <sup>3</sup> fractions and low optical bandgaps. Journal of Applied Physics, 2009, 105, 073521.	1.1	18

#	ARTICLE	IF	CITATIONS
73	Enhancement of phosphorus activation in vacancy engineered thin silicon-on-insulator substrates. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	4
74	High concentration Mn ion implantation in Si. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2009, 267, 1623-1625.	0.6	16
75	From Stems (and Stars) to Roses: Shape-Controlled Synthesis of Zinc Oxide Crystals. <i>Crystal Growth and Design</i> , 2009, 9, 3432-3437.	1.4	25
76	Failure mechanisms in adhesively bonded aluminium: an XPS and PEELS study. <i>Surface and Interface Analysis</i> , 2008, 40, 128-131.	0.8	5
77	The Inner Shell Influence on the Electronic Structure of Double-Walled Carbon Nanotubes. <i>Advanced Materials</i> , 2008, 20, 189-194.	11.1	33
78	Reversible increase of photocurrents in excimer laser-crystallized silicon solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2008, 92, 1378-1381.	3.0	7
79	The role of the gas species on the formation of carbon nanotubes during thermal chemical vapour deposition. <i>Nanotechnology</i> , 2008, 19, 445605.	1.3	12
80	Influences of Hydrogen Gas on Carbon Nanotube Growth. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1081, 1.	0.1	0
81	One-pot rapid low-cost synthesis of Pd-fullerite catalysts. <i>Journal of Materials Chemistry</i> , 2008, 18, 4808.	6.7	2
82	Engineering the shape of Zinc Oxide crystals via sonochemical or hydrothermal solution-based methods. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1087, 60401.	0.1	0
83	A fast sonochemical approach for the synthesis of solution processable ZnO rods. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	26
84	Improving the electron emission properties of ion-beam-synthesized Ag-SiO <sub>2</sub> nanocomposites by pulsed laser annealing. <i>Journal of Vacuum Science &amp; Technology B</i> , 2008, 26, 860-863.	1.3	1
85	Electronic state modification in laser deposited amorphous carbon films by the inclusion of nitrogen. <i>Journal of Applied Physics</i> , 2008, 104, 063701.	1.1	14
86	Characterisation of electron-beam deposited tungsten interconnects. <i>Journal of Physics: Conference Series</i> , 2008, 126, 012073.	0.3	2
87	In situ Observation of the Growth of Tungsten Oxide Nanostructures. <i>Springer Proceedings in Physics</i> , 2008, , 277-280.	0.1	1
88	Gas Sensing Properties of Vapour-Deposited Tungsten Oxide Nanostructures. <i>Springer Proceedings in Physics</i> , 2008, , 281-284.	0.1	1
89	Electron field emission properties of Co quantum dots in SiO <sub>2</sub> matrix synthesised by ion implantation. <i>Ultramicroscopy</i> , 2007, 107, 819-824.	0.8	19
90	Improving the electron emission properties of ion-beam-synthesized Ag-SiO <sub>2</sub> nanocomposites by pulsed laser annealing. , 2007, , .		0

#	ARTICLE	IF	CITATIONS
91	Inner-Tube Chirality Determination for Double-Walled Carbon Nanotubes by Scanning Tunneling Microscopy. Nano Letters, 2007, 7, 1232-1239.	4.5	31
92	Nanostructured Copper Phthalocyanine-Sensitized Multiwall Carbon Nanotube Films. Langmuir, 2007, 23, 6424-6430.	1.6	96
93	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.	11.1	42
94	Electrical conduction mechanism in laser deposited amorphous carbon. Thin Solid Films, 2007, 516, 257-261.	0.8	19
95	Microstructure Analyses of Metal-Filled Carbon Nanotubes Synthesized by Microwave Plasma-Enhanced Chemical Vapor Deposition. IEEE Nanotechnology Magazine, 2006, 5, 485-490.	1.1	8
96	Structural and optoelectronic properties of C60 rods obtained via a rapid synthesis route. Journal of Materials Chemistry, 2006, 16, 3715.	6.7	94
97	Bandgap enhancement of layered nanocrystalline silicon from excimer laser crystallization. Nanotechnology, 2006, 17, 5412-5416.	1.3	15
98	Nanostructural studies of PVD TiAlB coatings. Surface and Interface Analysis, 2006, 38, 731-735.	0.8	9
99	Energy loss spectroscopic profiling across linear interfaces: The example of amorphous carbon superlattices. Ultramicroscopy, 2006, 106, 346-355.	0.8	5
100	Controlled Growth-Reversal of Catalytic Carbon Nanotubes under Electron-Beam Irradiation. Nano Letters, 2006, 6, 1837-1841.	4.5	33
101	Electron field-emission properties of Ag-SiO <sub>2</sub> nanocomposite layers. Journal of Vacuum Science & Technology B, 2006, 24, 958.	1.3	17
102	Subnanometer-resolved measurement of the tunneling effective mass using bulk plasmons. Applied Physics Letters, 2006, 88, 122109.	1.5	3
103	Negative differential conductance observed in electron field emission from band gap modulated amorphous-carbon nanolayers. Applied Physics Letters, 2006, 89, 193103.	1.5	16
104	Electron Field Emission Properties of Co Quantum Dots in SiO <sub>2</sub> Matrix Synthesised by Ion Implantation. , 2006, , .		0
105	Negative Differential Conductance Observed in Electron Field Emission from Band Gap Modulated A-C Nanolayers. , 2006, , .		0
106	Damage effects in Pyrex by CF <sub>4</sub> reactive ion etching in dual RF-microwave plasmas. Micro and Nano Letters, 2006, 1, 103.	0.6	6
107	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.	1.7	4
108	Diamond-like carbon thin films for high-temperature applications prepared by filtered pulsed laser deposition. Vacuum, 2005, 80, 163-167.	1.6	21

#	ARTICLE	IF	CITATIONS
109	Electron energy loss spectroscopy of carbonaceous materials. <i>Thin Solid Films</i> , 2005, 488, 283-290.	0.8	28
110	Dendrimer assisted catalytic growth of mats of multiwall carbon nanofibers. <i>Carbon</i> , 2005, 43, 2229-2231.	5.4	6
111	Carbon spheres generated in "dusty plasmas"™. <i>Carbon</i> , 2005, 43, 704-708.	5.4	30
112	Silver intercalated carbon nanotubes. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	1
113	Ion-Beam-Synthesised Ag-SiO <sub>2</sub> Nanocomposite Layers for Electron Field Emission Devices. <i>Materials Research Society Symposia Proceedings</i> , 2005, 908, 1.	0.1	0
114	Study of the current stressing in nanomanipulated three-dimensional carbon nanotube structures. <i>Applied Physics Letters</i> , 2005, 87, 033102.	1.5	14
115	Deployment of titanium thermal barrier for low-temperature carbon nanotube growth. <i>Applied Physics Letters</i> , 2005, 87, 253115.	1.5	6
116	Quantum effects in band gap-modulated amorphous carbon superlattices. , 2005, , 307-310.		1
117	Carbon nanotubes and nanostructures grown at below 400°C. <i>Materials Research Society Symposia Proceedings</i> , 2005, 901, 1.	0.1	0
118	Dielectric properties of WS <sub>2</sub> -coated multiwalled carbon nanotubes studied by energy-loss spectroscopic profiling. <i>Applied Physics Letters</i> , 2005, 86, 063112.	1.5	6
119	Highly photoconductive amorphous carbon nitride films prepared by cyclic nitrogen radical sputtering. <i>Applied Physics Letters</i> , 2004, 85, 2803-2805.	1.5	28
120	Growth kinetics changes of vertically aligned carbon nanostructures synthesised at low substrate temperatures. <i>Materials Research Society Symposia Proceedings</i> , 2004, 858, 192.	0.1	0
121	Branched carbon nanofiber network synthesis at room temperature using radio frequency supported microwave plasmas. <i>Journal of Applied Physics</i> , 2004, 96, 3443-3446.	1.1	22
122	Thermal expansion coefficient of hydrogenated amorphous carbon. <i>Applied Physics Letters</i> , 2003, 83, 3099-3101.	1.5	85
123	Direct observation and characterisation of the oxide nanostructured interface resulting from organosilane pre-treatment of aluminium. <i>Materials Research Society Symposia Proceedings</i> , 2002, 734, 181.	0.1	1
124	Structural characterization of hard a-C:H films as a function of the methane pressure. <i>Diamond and Related Materials</i> , 2002, 11, 980-984.	1.8	7
125	Large-area synthesis of carbon nanofibres at room temperature. <i>Nature Materials</i> , 2002, 1, 165-168.	13.3	204
126	Density, sp <sup>3</sup> fraction, and cross-sectional structure of amorphous carbon films determined by x-ray reflectivity and electron energy-loss spectroscopy. <i>Physical Review B</i> , 2000, 62, 11089-11103.	1.1	506



#	ARTICLE	IF	CITATIONS
127	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.	1.5	81
128	Density, sp <sup>3</sup> content and internal layering of DLC films by X-ray reflectivity and electron energy loss spectroscopy. Diamond and Related Materials, 2000, 9, 771-776.	1.8	94
129	Deposition of carbon nitride films using an electron cyclotron wave resonance plasma source. Diamond and Related Materials, 2000, 9, 524-529.	1.8	41
130	Stress reduction and bond stability during thermal annealing of tetrahedral amorphous carbon. Journal of Applied Physics, 1999, 85, 7191-7197.	1.1	390
131	The electron field emission properties of Ag-SiO <sub>2</sub> /sub 2/ nanocomposite layers. , 0, , .		0
132	Microstructure analyses of metal-filled carbon nanotubes synthesized by microwave plasma-enhanced chemical vapour deposition. , 0, , .		0
133	Novel approach to low substrate temperature synthesis of carbon nanotubes. , 0, , .		0
134	Growth of tungsten oxide nanowires using simple thermal heating. , 0, , .		1