Viera Skakalova

List of Publications by Year
in descending order

107 papers	5,250 citations	136740 32 h-index	85405 71 g-index
113 all docs	113 docs citations	113 times ranked	7745 citing authors

#	Article	IF	Citations
1	Largeâ€Diameter Carbon Nanotube Transparent Conductor Overcoming Performanceâ€“Yield Tradeoff. Advanced Functional Materials, 2022, 32, 2103397.	7.8	24
2	Toward Exotic Layered Materials: 2D Cuprous Iodide. Advanced Materials, 2022, 34, e2106922.	11.1	28
3	Atom-by-atom chemical identification from scanning transmission electron microscopy images in presence of noise and residual aberrations. Ultramicroscopy, 2021, 227, 113292.	0.8	4
4	Catalytic graphitization of single-crystal diamond. Carbon, 2021, 185, 300-313.	5.4	24
5	Ni-mediated reactions in nanocrystalline diamond on Si substrates: the role of the oxide barrier. RSC Advances, 2020, 10, 8224-8232.	1.7	6
6	Direct imaging of light-element impurities in graphene reveals triple-coordinated oxygen. Nature Communications, 2019, 10, 4570.	5.8	39
7	Enhanced Tunneling in a Hybrid of Single-Walled Carbon Nanotubes and Graphene. ACS Nano, 2019, 13, 11522-11529.	7.3	23
8	Direct visualization of the 3D structure of silicon impurities in graphene. Applied Physics Letters, 2019, 114, .	1.5	15
9	Covalent Diamondâ€“Graphite Bonding: Mechanism of Catalytic Transformation. ACS Nano, 2019, 13, 4621-4630.	7.3	38
10	Functionalized graphene transistor for ultrasensitive detection of carbon quantum dots. Journal of Applied Physics, 2019, 126, 214303.	1.1	3
11	Tuning the orientation of few-layer MoS₂ films using one-zone sulfurization. RSC Advances, 2019, 9, 29645-29651.	1.7	24
12	Biomass waste-carbon/reduced graphene oxide composite electrodes for enhanced supercapacitors. Electrochimica Acta, 2019, 298, 910-917.	2.6	68
13	Chemical Oxidation of Graphite: Evolution of the Structure and Properties. Journal of Physical Chemistry C, 2018, 122, 929-935.	1.5	38
14	Study of Ni-Catalyzed Graphitization Process of Diamond by <i>in Situ</i> X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2018, 122, 6629-6636.	1.5	22
15	Inhibition of E. coli Growth by Nanodiamond and Graphene Oxide Enhanced by Luria-Bertani Medium. Nanomaterials, 2018, 8, 140.	1.9	35
16	Computational insights and the observation of SiC nanograin assembly: towards 2D silicon carbide. Scientific Reports, 2017, 7, 4399.	1.6	73
17	Diamond/carbon nanotube composites: Raman, FTIR and XPS spectroscopic studies. Carbon, 2017, 111, 54-61.	5.4	247
18	Growth, structure and stability of sputter-deposited MoS₂ thin films. Beilstein Journal of Nanotechnology, 2017, 8, 1115-1126.	1.5	44

#	ARTICLE	IF	CITATIONS
19	Bacterial response to nanodiamonds and graphene oxide sheets. Physica Status Solidi (B): Basic Research, 2016, 253, 2481-2485.	0.7	19
20	High-yield fabrication and properties of 1.4â€‰nm nanodiamonds with narrow size distribution. Scientific Reports, 2016, 6, 38419.	1.6	63
21	Structural, Electrical, and UV Detection Properties of ZnO/Si Heterojunction Diodes. IEEE Transactions on Electron Devices, 2016, 63, 1949-1956.	1.6	27
22	Vibrational Properties of a Two-Dimensional Silica Kagome Lattice. ACS Nano, 2016, 10, 10929-10935.	7.3	18
23	Dimensional crossover in the quantum transport behaviour of the natural topological insulator Aleksite. Scientific Reports, 2015, 5, 11691.	1.6	5
24	Fractional Quantum Hall States in Bilayer Graphene Probed by Transconductance Fluctuations. Nano Letters, 2015, 15, 7445-7451.	4.5	33
25	Size and Purity Control of HPHT Nanodiamonds down to 1 nm. Journal of Physical Chemistry C, 2015, 119, 27708-27720.	1.5	144
26	Synthesis of carbon nanowalls on macroporous nickel foam by atmospheric glow discharge chemical vapour deposition. Physica Status Solidi (B): Basic Research, 2014, 251, 933-936.	0.7	1
27	Fabrication of free-standing pure carbon-based composite material with the combination of sp2â€“sp3 hybridizations. Applied Surface Science, 2014, 308, 211-215.	3.1	3
28	Electronic transport in composites of graphite oxide with carbon nanotubes. Carbon, 2014, 72, 224-232.	5.4	22
29	Carbon nanotubes overgrown and ingrown with nanocrystalline diamond deposited by different CVD plasma systems. Physica Status Solidi (B): Basic Research, 2014, 251, 2413-2419.	0.7	6
30	Defects in bilayer silica and graphene: common trends in diverse hexagonal two-dimensional systems. Scientific Reports, 2013, 3, 3482.	1.6	80
31	Probing from Both Sides: Reshaping the Graphene Landscape via Face-to-Face Dual-Probe Microscopy. Nano Letters, 2013, 13, 1934-1940.	4.5	31
32	Graphene, nanotubes and related materials. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1161-1162.	0.8	0
33	Report on the Special Miniworkshop â€œnano&Managementâ€• Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1877-1881.	0.8	0
34	Transconductance Fluctuations as a Probe for Interaction-Induced Quantum Hall States in Graphene. Physical Review Letters, 2012, 109, 056602.	2.9	32
35	Quantitative Atomic-resolution Imaging and Spectroscopy of a 2D Silica Glass. Microscopy and Microanalysis, 2012, 18, 340-341.	0.2	0
36	Imaging the Atoms in a Two-Dimensional Silica Glass on Graphene. Microscopy and Microanalysis, 2012, 18, 1496-1497.	0.2	0

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37	Quantitative Analysis of Electron Beam-Induced Destruction of Graphene Membranes under an Electron Microscope. Microscopy and Microanalysis, 2012, 18, 1500-1501.	0.2	0
38	Atomistic Description of Electron Beam Damage in Nitrogen-Doped Graphene and Single-Walled Carbon Nanotubes. ACS Nano, 2012, 6, 8837-8846.	7.3	119
39	HFCVD growth of various carbon nanostructures on SWCNT paper controlled by surface treatment. Physica Status Solidi (B): Basic Research, 2012, 249, 2399-2403.	0.7	12
40	Carbon nanowalls synthesis by means of atmospheric dcPECVD method. Physica Status Solidi (B): Basic Research, 2012, 249, 2625-2628.	0.7	15
41	Accurate Measurement of Electron Beam Induced Displacement Cross Sections for Single-Layer Graphene. Physical Review Letters, 2012, 108, 196102.	2.9	383
42	Direct Imaging of a Two-Dimensional Silica Glass on Graphene. Nano Letters, 2012, 12, 1081-1086.	4.5	236
43	Atom-by-Atom Observation of Grain Boundary Migration in Graphene. Nano Letters, 2012, 12, 3168-3173.	4.5	178
44	Electronic conduction in polymers, carbon nanotubes and graphene. Chemical Society Reviews, 2011, 40, 3786.	18.7	186
45	Experimental analysis of charge redistribution dueÂto chemical bonding by high-resolution transmission electron microscopy. Nature Materials, 2011, 10, 209-215.	13.3	270
46	Variations of electronic transport in graphene of different origins. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 3191-3194.	0.8	2
47	Penetration based CNT/Solâ€"Gel composite films and their remarkable electrical properties. Microelectronic Engineering, 2011, 88, 2513-2515.	1.1	8
48	Bonding Effects in Nitrogen Doped Graphene and Hexagonal Boron Nitride. Microscopy and Microanalysis, 2010, 16, 542-543.	0.2	3
49	Growth and properties of few-layer graphene prepared by chemical vapor deposition. Carbon, 2010, 48, 1088-1094.	5.4	333
50	Resistance and mesoscopic fluctuations in graphene. Physica Status Solidi (B): Basic Research, 2010, 247, 2983-2987.	0.7	5
51	Growth and properties of chemically modified graphene. Physica Status Solidi (B): Basic Research, 2010, 247, 2915-2919.	0.7	15
52	Preface: Phys. Status Solidi C 7/3-4. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1215-1215.	0.8	0
53	Shubnikovâ€"de Haas and Aharonov Bohm effects in a graphene nanoring structure. Applied Physics Letters, 2010, 96, .	1.5	22
54	Raman Scattering at Pure Graphene Zigzag Edges. Nano Letters, 2010, 10, 4544-4548.	4.5	166

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55	Correlation between resistance fluctuations and temperature dependence of conductivity in graphene. Physical Review B, 2009, 80, .	1.1	41
56	Effects of ion beam heating on Raman spectra of single-walled carbon nanotubes. Applied Physics Letters, 2009, 94, .	1.5	8
57	Growth of Large Transparent and Conducting Graphene Sheets Using Chemical Vapor Deposition. ECS Transactions, 2009, 25, 59-61.	0.3	0
58	Ion irradiation effects on conduction in single-wall carbon nanotube networks. Applied Physics A: Materials Science and Processing, 2008, 90, 597-602.	1.1	53
59	SWNT probed by multi-frequency EPR and nonresonant microwave absorption. Physica Status Solidi (B): Basic Research, 2008, 245, 2251-2254.	0.7	18
60	Electrical properties of C⁴⁺ irradiated singleâ€walled carbon nanotube paper. Physica Status Solidi (B): Basic Research, 2008, 245, 2280-2283.	0.7	21
61	Layer-by-layer deposition of ultra-thin films of carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2257-2262.	1.3	3
62	Direct transfer of CVD-grown transparent SWCNT networks from growth substrate to polymer. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2430-2433.	1.3	6
63	Modelling conduction in carbon nanotube networks with different thickness, chemical treatment and irradiation. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2311-2318.	1.3	44
64	Raman mode shifts correlated with conductivity and Young's modulus changes in modified carbon nanotube networks. Physica Status Solidi - Rapid Research Letters, 2008, 2, 62-64.	1.2	9
65	Transport current improvements ofin situMgB2tapes by the addition of carbon nanotubes, silicon carbide or graphite. Superconductor Science and Technology, 2007, 20, 105-111.	1.8	30
66	Dynamic percolation of carbon nanotubes in liquid medium. Journal of Materials Chemistry, 2007, 17, 4846.	6.7	26
67	Effect of fluorination on electrical properties of single walled carbon nanotubes and C60 peapods in networks. Current Applied Physics, 2007, 7, 42-46.	1.1	26
68	Method for continuous production of catalysts for synthesis of carbon nanotubes. Physica Status Solidi (B): Basic Research, 2007, 244, 3930-3934.	0.7	4
69	Catalytic chemical vapour deposition growth of single wall carbon nanotube films on different substrates for transparent electronic devices. Physica Status Solidi (B): Basic Research, 2007, 244, 3935-3938.	0.7	3
70	Thin transparent carbon nanotube networks: effects of ion irradiation. Physica Status Solidi (B): Basic Research, 2007, 244, 4199-4203.	0.7	20
71	Intermediate frequency modes in Raman spectra of Ar+-irradiated single-wall carbon nanotubes. Physica Status Solidi - Rapid Research Letters, 2007, 1, 138-140.	1.2	28
72	In-situ synthesis of transparent and conductive carbon nanotube networks. Physica Status Solidi - Rapid Research Letters, 2007, 1, 165-167.	1.2	11

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73	Electrical properties of transparent carbon nanotube networks prepared through different techniques. Physica Status Solidi - Rapid Research Letters, 2007, 1, 178-180.	1.2	55
74	Electronic transport in carbon nanotubes: From individual nanotubes to thin and thick networks. , 2006, , .		8
75	Electronic transport in carbon nanotubes: From individual nanotubes to thin and thick networks. Physical Review B, 2006, 74, .	1.1	217
76	Electron transport in Ar+-irradiated single wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2006, 243, 3346-3350.	0.7	12
77	Conducting and transparent SWNT/polymer composites. Physica Status Solidi (B): Basic Research, 2006, 243, 3440-3444.	0.7	35
78	Synthesis of SWCNTs for C82 peapods by arc-discharge process using nonmagnetic catalysts. Physica Status Solidi (B): Basic Research, 2006, 243, 3042-3045.	0.7	8
79	Carbon Nanotubes in Electronics. , 2006, , .		0
80	Effect of Chemical Treatment on Electrical Conductivity, Infrared Absorption, and Raman Spectra of Single-Walled Carbon Nanotubes. Journal of Physical Chemistry B, 2005, 109, 7174-7181.	1.2	204
81	Electron Transport â€" from Buckypaper to Thin Single-Wall Nanotube Networks. AIP Conference Proceedings, 2005, , .	0.3	0
82	The Influence of Sulfur Promoter on the Production of SWCNTs by the Arc-Discharge Process. AIP Conference Proceedings, 2005, , .	0.3	1
83	Raman spectroscopy of single-wall carbon nanotubes and graphite irradiated by Î³ rays. Journal of Applied Physics, 2005, 98, 024311.	1.1	80
84	Electrical and mechanical properties of nanocomposites of single wall carbon nanotubes with PMMA. Synthetic Metals, 2005, 152, 349-352.	2.1	116
85	Effect of SOCl2 Treatment on Electrical and Mechanical Properties of Single-Wall Carbon Nanotube Networks. Journal of the American Chemical Society, 2005, 127, 5125-5131.	6.6	330
86	Gamma-irradiated and functionalized single wall nanotubes. Diamond and Related Materials, 2004, 13, 296-298.	1.8	73
87	Synthesis and characterization of carbon nanotube-conducting polymer thin films. Diamond and Related Materials, 2004, 13, 256-260.	1.8	94
88	Transport Properties of Functionalized Single Wall Nanotubes Buckypaper. AIP Conference Proceedings, 2004, , .	0.3	0
89	Hydrogen storage in carbon nanotubes. Comptes Rendus Physique, 2003, 4, 1055-1062.	0.3	104
90	Effect Of Gamma-Irradiation on Single-Wall Carbon Nanotube Paper. AIP Conference Proceedings, 2003, , .	0.3	26

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91	Hydrogen storage in carbon nanostructures. Journal of Alloys and Compounds, 2002, 330-332, 654-658.	2.8	215
92	Chemical processes during solid state reaction of carbon with alkali salts prepared for gravimetric hydrogen storage measurements. Chemical Physics Letters, 2002, 365, 333-337.	1.2	10
93	Conformational transition in polypyrrole at low pressure. Synthetic Metals, 1999, 101, 308-309.	2.1	5
94	Sensitivity of the electrical conductivity of doped polypyrrole to low pressure. Synthetic Metals, 1999, 101, 399-400.	2.1	3
95	Low-pressure-induced conformational transition in doped polypyrrole: electrical conductivity. Advanced Materials for Optics and Electronics, 1998, 8, 77-80.	0.6	0
96	Low-pressure-induced conformational transition in doped polypyrrole: optical and IR spectra. Advanced Materials for Optics and Electronics, 1998, 8, 81-85.	0.6	0
97	Low pressure effect in the electrical conductivity of doped polypyrrole. Synthetic Metals, 1998, 94, 279-283.	2.1	21
98	Shape memory effect of dehydrochlorinated crosslinked poly(vinyl chloride). Macromolecular Chemistry and Physics, 1997, 198, 3161-3172.	1.1	28
99	Carbon Onions: Optical Investigation of Electron Beam Irradiated Carbon Materials. Materials Science Forum, 1995, 191, 171-176.	0.3	2
100	Low Pressure Dependence of the Electrical Conductivity in Doped Polypyrrole. Materials Science Forum, 1995, 191, 135-140.	0.3	0
101	Anomalies in the temperature dependence of the electrical conductivity of polypyrrole. Macromolecular Chemistry and Physics, 1994, 195, 2523-2529.	1.1	7
102	Low pressure dependence of the optical absorption spectra of doped polyacetylene and polypyrrole. Synthetic Metals, 1993, 55, 141-146.	2.1	1
103	Thermal properties of powder polyacetylene. Synthetic Metals, 1993, 55, 135-140.	2.1	1
104	Electrochemical preparation of thick porous polypyrrole layers. Synthetic Metals, 1993, 53, 227-235.	2.1	21
105	Temperature Relaxation of DC Conductivity of Doped Polypyrrole. Materials Science Forum, 1993, 122, 93-98.	0.3	1
106	Pressure Relaxation of the DC Conductivity and Optical Absorption Spectra in Doped Polypyrrole. Materials Science Forum, 1993, 122, 99-104.	0.3	2
107	Anomaly in the temperature dependence of the electrical conductivity of foam polypyrrole. Synthetic Metals, 1990, 36, 253-262.	2.1	2