Elena Bekyarova

List of Publications by Year
in descending order

98 papers	11,084 citations	66343 42 h-index	39675 94 g-index
103 all docs	103 docs citations	103 times ranked	14367 citing authors

#	Article	IF	Citations
1	The coordination chemistry of oxide and nanocarbon materials. Dalton Transactions, 2022, 51, 8557-8570.	3.3	7
2	Design of Carbon Nanomaterials for Energy Applications. ECS Meeting Abstracts, 2022, MA2022-01, 618-618.	0.0	0
3	Evolution of cellulose acetate to monolayer graphene. Carbon, 2021, 174, 24-35.	10.3	15
4	Synergistic enhancement of thermal conductivity by addition of graphene nanoplatelets to threeâ€dimensional boron nitride scaffolds for polyamide 6 composites. Polymer Engineering and Science, 2021, 61, 1415-1426.	3.1	11
5	Origin of the Giant Enhanced Raman Scattering by Sulfur Chains Encapsulated inside Single-Wall Carbon Nanotubes. ACS Nano, 2021, 15, 8574-8582.	14.6	10
6	Carbon Nanomaterials for Energy Applications. ECS Meeting Abstracts, 2021, MA2021-01, 494-494.	0.0	0
7	Hexagonal Boron Nitride Encapsulation of Organic Microcrystals and Energy-Transfer Dynamics. Journal of Physical Chemistry C, 2020, 124, 21170-21177.	3.1	1
8	Chemically Functionalized Water-Soluble Single-Walled Carbon Nanotubes Obstruct Vesicular/Plasmalemmal Recycling in Astrocytes Down-Stream of Calcium Ions. Cells, 2020, 9, 1597.	4.1	2
9	Shaping Organic Microcrystals Using Focused Ion Beam Milling. Crystal Growth and Design, 2020, 20, 1583-1589.	3.0	12
10	Antimicrobial Mechanisms and Effectiveness of Graphene and Graphene-Functionalized Biomaterials. A Scope Review. Frontiers in Bioengineering and Biotechnology, 2020, 8, 465.	4.1	165
11	Covalent Atomic Bridges Enable Unidirectional Enhancement of Electronic Transport in Aligned Carbon Nanotubes. ACS Applied Materials & Interfaces, 2019, 11, 19315-19323.	8.0	27
12	MoS₂-Based Optoelectronic Gas Sensor with Sub-parts-per-billion Limit of NO₂ Gas Detection. ACS Nano, 2019, 13, 3196-3205.	14.6	349
13	(Invited) Design of Metal - Carbon Nanotube Structures for Electronic and Optoelectronic Applications. ECS Meeting Abstracts, 2019, , .	0.0	0
14	Organometallic chemistry of graphene: Photochemical complexation of graphene with group 6 transition metals. Carbon, 2018, 129, 450-455.	10.3	22
15	Effects of Chemically-Functionalized Single-Walled Carbon Nanotubes on the Morphology and Vitality of D54MG Human Glioblastoma Cells. Neuroglia (Basel, Switzerland), 2018, 1, 327-338.	0.9	3
16	Substrate temperature effect during the deposition of (Cu/Sn/Cu/Zn) stacked precursor CZTS thin film deposited by electron-beam evaporation. Journal of Materials Science: Materials in Electronics, 2018, 29, 20476-20484.	2.2	28
17	Effect of constructive rehybridization on transverse conductivity of aligned single-walled carbon nanotube films. Materials Today, 2018, 21, 937-943.	14.2	10
18	Protection of Molecular Microcrystals by Encapsulation under Single-Layer Graphene. ACS Omega, 2018, 3, 8129-8134.	3.5	14

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19	High Modulation Speed, Depth, and Coloration Efficiency of Carbon Nanotube Thin Film Electrochromic Device Achieved by Counter Electrode Impedance Matching. Advanced Materials Interfaces, 2018, 5, 1800861.	3.7	19
20	Differentiation of stem cells from apical papilla into neural lineage using graphene dispersion and single walled carbon nanotubes. Journal of Biomedical Materials Research - Part A, 2018, 106, 2653-2661.	4.0	32
21	Sublimation-assisted graphene transfer technique based on small polyaromatic hydrocarbons. Nanotechnology, 2017, 28, 255701.	2.6	21
22	Visible-Blind UV Photodetector Based on Single-Walled Carbon Nanotube Thin Film/ZnO Vertical Heterostructures. ACS Applied Materials & Interfaces, 2017, 9, 37094-37104.	8.0	67
23	Advances in transferring chemical vapour deposition graphene: a review. Materials Horizons, 2017, 4, 1054-1063.	12.2	121
24	(Invited) Effect of Covalent Chemistry on the Electronic Structure and Properties of the Carbon Allotropes. ECS Transactions, 2017, 77, 569-579.	0.5	2
25	A solid state energy storage device with supercapacitorâ€“battery hybrid design. Journal of Materials Chemistry A, 2017, 5, 15266-15272.	10.3	31
26	Fast Electrochromic Device Based on Single-Walled Carbon Nanotube Thin Films. Nano Letters, 2016, 16, 5386-5393.	9.1	77
27	Large-scale cellulose-assisted transfer of graphene toward industrial applications. Carbon, 2016, 110, 286-291.	10.3	38
28	Application of Organometallic Chemistry to the Electrical Interconnection of Graphene Nanoplatelets. Chemistry of Materials, 2016, 28, 2260-2266.	6.7	17
29	Giant Raman Response to the Encapsulation of Sulfur in Narrow Diameter Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2016, 138, 40-43.	13.7	43
30	Solution-phase synthesis of chromium-functionalized single-walled carbon nanotubes. Materials Letters, 2015, 142, 312-316.	2.6	5
31	Networks of Semiconducting SWNTs: Contribution of Midgap Electronic States to the Electrical Transport. Accounts of Chemical Research, 2015, 48, 2270-2279.	15.6	37
32	Effect of Lanthanide Metal Complexation on the Properties and Electronic Structure of Single-Walled Carbon Nanotube Films. ACS Applied Materials & Interfaces, 2015, 7, 28013-28018.	8.0	5
33	Chemically functionalized single-walled carbon nanotubes enhance the glutamate uptake characteristics of mouse cortical astrocytes. Amino Acids, 2015, 47, 1379-1388.	2.7	17
34	Photochemical generation of bis-hexahapto chromium interconnects between the graphene surfaces of single-walled carbon nanotubes. Materials Horizons, 2015, 2, 81-85.	12.2	12
35	Formation of Transition Metal Cluster Adducts on the Surface of Single-walled Carbon Nanotubes: HRTEM Studies. Fullerenes Nanotubes and Carbon Nanostructures, 2014, 22, 47-53.	2.1	3
36	Optical and electronic properties of thin films and solutions of functionalized forms of graphene and related carbon materials. Carbon, 2014, 72, 82-88.	10.3	23

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37	Hexahapto-lanthanide interconnects between the conjugated surfaces of single-walled carbon nanotubes. Dalton Transactions, 2014, 43, 7379-7382.	3.3	14
38	Effect of Atomic Interconnects on Percolation in Single-Walled Carbon Nanotube Thin Film Networks. Nano Letters, 2014, 14, 3930-3937.	9.1	42
39	Changes in the Morphology and Proliferation of Astrocytes Induced by Two Modalities of Chemically Functionalized Single-Walled Carbon Nanotubes are Differentially Mediated by Glial Fibrillary Acidic Protein. Nano Letters, 2014, 14, 3720-3727.	9.1	20
40	Chemically Engineered Graphene-Based 2D Organic Molecular Magnet. ACS Nano, 2013, 7, 10011-10022.	14.6	47
41	Chemically Functionalized Single-Walled Carbon Nanotube Films Modulate the Morpho-Functional and Proliferative Characteristics of Astrocytes. Nano Letters, 2013, 13, 4387-4392.	9.1	25
42	Effect of Covalent Chemistry on the Electronic Structure and Properties of Carbon Nanotubes and Graphene. Accounts of Chemical Research, 2013, 46, 65-76.	15.6	161
43	Organometallic Hexahapto Functionalization of Single Layer Graphene as a Route to High Mobility Graphene Devices. Advanced Materials, 2013, 25, 1131-1136.	21.0	59
44	Charge-compensated, semiconducting single-walled carbon nanotube thin film as an electrically configurable optical medium. Nature Photonics, 2013, 7, 459-465.	31.4	37
45	Covalent chemistry in graphene electronics. Materials Today, 2012, 15, 276-285.	14.2	58
46	Chemically Functionalized Water-Soluble Single-Walled Carbon Nanotubes Modulate Morpho-Functional Characteristics of Astrocytes. Nano Letters, 2012, 12, 4742-4747.	9.1	38
47	Synthesis, Structure and Solid State Properties of Cyclohexanemethylamine Substituted Phenalenyl Based Molecular Conductor. Crystals, 2012, 2, 446-465.	2.2	4
48	Solidâ€state Bisâ€hexahaptoâ€metal complexation of singleâ€walled carbon nanotubes. Journal of Physical Organic Chemistry, 2012, 25, 607-610.	1.9	26
49	Synthesis, structure and solid state properties of benzannulated phenalenyl based neutral radical conductor. Journal of Physical Organic Chemistry, 2012, 25, 566-573.	1.9	11
50	Hexahaptoâ€Metal Complexes of Singleâ€Walled Carbon Nanotubes. Macromolecular Chemistry and Physics, 2012, 213, 1001-1019.	2.2	35
51	Chemistry at the Dirac Point: Dielsâ€“Alder Reactivity of Graphene. Accounts of Chemical Research, 2012, 45, 673-682.	15.6	158
52	High Energy Density Supercapacitor Based on a Hybrid Carbon Nanotubeâ€“Reduced Graphite Oxide Architecture. Advanced Energy Materials, 2012, 2, 438-444.	19.5	182
53	Reversible Grafting of Î±â€Naphthylmethyl Radicals to Epitaxial Graphene. Angewandte Chemie - International Edition, 2012, 51, 4901-4904.	13.8	32
54	Effect of Group 6 Transition Metal Coordination on the Conductivity of Graphite Nanoplatelets. Materials Letters, 2012, 80, 171-174.	2.6	20

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55	Covalent Chemistry for Graphene Electronics. Journal of Physical Chemistry Letters, 2011, 2, 2487-2498.	4.6	131
56	Organometallic chemistry of extended periodic Ï€-electron systems: hexahapto-chromium complexes of graphene and single-walled carbon nanotubes. Chemical Science, 2011, 2, 1326.	7.4	96
57	Synthesis, Dispersion, and Viscosity of Poly(ethylene glycol)-Functionalized Water-Soluble Single-Walled Carbon Nanotubes. Chemistry of Materials, 2011, 23, 1246-1253.	6.7	47
58	Aryl Functionalization as a Route to Band Gap Engineering in Single Layer Graphene Devices. Nano Letters, 2011, 11, 4047-4051.	9.1	136
59	Dielsâ^'Alder Chemistry of Graphite and Graphene: Graphene as Diene and Dienophile. Journal of the American Chemical Society, 2011, 133, 3324-3327.	13.7	253
60	Effect of Nitrophenyl Functionalization on the Magnetic Properties of Epitaxial Graphene. Small, 2011, 7, 1175-1180.	10.0	65
61	Enhanced photosensitivity of electro-oxidized epitaxial graphene. Applied Physics Letters, 2011, 98, .	3.3	21
62	Chemically Engineered Singleâ€Walled Carbon Nanotube Materials for the Electronic Detection of Hydrogen Chloride. Advanced Materials, 2010, 22, 848-852.	21.0	24
63	Electro-oxidized Epitaxial Graphene Channel Field-Effect Transistors with Single-Walled Carbon Nanotube Thin Film Gate Electrode. Journal of the American Chemical Society, 2010, 132, 14429-14436.	13.7	38
64	Dependence of the thermal conductivity of two-dimensional graphite nanoplatelet-based composites on the nanoparticle size distribution. Journal of Physics Condensed Matter, 2010, 22, 334216.	1.8	41
65	Spectroscopy of Covalently Functionalized Graphene. Nano Letters, 2010, 10, 4061-4066.	9.1	507
66	Chemical approach to the realization of electronic devices in epitaxial graphene. Physica Status Solidi - Rapid Research Letters, 2009, 3, 184-186.	2.4	39
67	Chemical Modification of Epitaxial Graphene: Spontaneous Grafting of Aryl Groups. Journal of the American Chemical Society, 2009, 131, 1336-1337.	13.7	782
68	Conductive Single-Walled Carbon Nanotube Substrates Modulate Neuronal Growth. Nano Letters, 2009, 9, 264-268.	9.1	177
69	Functionalization and Dissolution of Nitric Acid Treated Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2009, 131, 18153-18158.	13.7	146
70	Enhanced Thermal Conductivity in a Hybrid Graphite Nanoplatelet â€“ Carbon Nanotube Filler for Epoxy Composites. Advanced Materials, 2008, 20, 4740-4744.	21.0	878
71	Nanoporosities and catalytic activities of Pd-tailored single wall carbon nanohorns. Journal of Colloid and Interface Science, 2008, 322, 209-214.	9.4	18
72	Graphite Nanoplateletâ^'Epoxy Composite Thermal Interface Materials. Journal of Physical Chemistry C, 2007, 111, 7565-7569.	3.1	941

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73	Functionalized Single-Walled Carbon Nanotubes for Carbon Fiberâ˜Epoxy Compositesâ€. Journal of Physical Chemistry C, 2007, 111, 17865-17871.	3.1	141
74	Mechanism of Ammonia Detection by Chemically Functionalized Single-Walled Carbon Nanotubes:â€‰InSituElectrical and Optical Study of Gas Analyte Detection. Journal of the American Chemical Society, 2007, 129, 10700-10706.	13.7	86
75	Poly(m-aminobenzene sulfonic acid) functionalized single-walled carbon nanotubes based gas sensor. Nanotechnology, 2007, 18, 165504.	2.6	116
76	Application of Centrifugation to the Large-Scale Purification of Electric Arc-Produced Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2006, 128, 9902-9908.	13.7	110
77	Chemical Engineering of the Single-Walled Carbon Nanotubeâ˜Nylon 6 Interface. Journal of the American Chemical Society, 2006, 128, 7492-7496.	13.7	186
78	Incorporation of highly dispersed single-walled carbon nanotubes in a polyimide matrix. Composites Science and Technology, 2006, 66, 1190-1197.	7.8	83
79	Solution Properties of Graphite and Graphene. Journal of the American Chemical Society, 2006, 128, 7720-7721.	13.7	1,215
80	Fabrication and Properties of Conducting Polypyrrole/SWNT-PABS Composite Films and Nanotubes. Electroanalysis, 2006, 18, 1047-1054.	2.9	48
81	Effect of single-walled carbon nanotube purity on the thermal conductivity of carbon nanotube-based composites. Applied Physics Letters, 2006, 89, 133102.	3.3	146
82	Applications of Carbon Nanotubes in Biotechnology and Biomedicine. Journal of Biomedical Nanotechnology, 2005, 1, 3-17.	1.1	242
83	Continuous Spinning of a Single-Walled Carbon Nanotubeâ˜Nylon Composite Fiber. Journal of the American Chemical Society, 2005, 127, 3847-3854.	13.7	380
84	Palladium Nanoclusters Deposited on Single-Walled Carbon Nanohorns. Journal of Physical Chemistry B, 2005, 109, 3711-3714.	2.6	55
85	Electronic Properties of Single-Walled Carbon Nanotube Networks. Journal of the American Chemical Society, 2005, 127, 5990-5995.	13.7	363
86	Influence of the Zeta Potential on the Dispersability and Purification of Single-Walled Carbon Nanotubes. Journal of Physical Chemistry B, 2005, 109, 11520-11524.	2.6	210
87	Large-Scale Fabrication of Aligned Single-Walled Carbon Nanotube Array and Hierarchical Single-Walled Carbon Nanotube Assembly. Journal of the American Chemical Society, 2004, 126, 16698-16699.	13.7	105
88	Preparation of Single-Walled Carbon Nanotube Reinforced Polystyrene and Polyurethane Nanofibers and Membranes by Electrospinning. Nano Letters, 2004, 4, 459-464.	9.1	502
89	Controlled Opening of Single-Wall Carbon Nanohorns by Heat Treatment in Carbon Dioxide. Journal of Physical Chemistry B, 2003, 107, 4479-4484.	2.6	74
90	Single-Wall Nanostructured Carbon for Methane Storage. Journal of Physical Chemistry B, 2003, 107, 4681-4684.	2.6	199

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91	Adsorption of Supercritical N2 and O2 on Pore-Controlled Carbon Aerogels. Journal of Colloid and Interface Science, 2001, 238, 357-361.	9.4	11
92	Study on Active Carbon-Supported Two-Component Catalysts for NO Conversion. Journal of Colloid and Interface Science, 1999, 213, 400-404.	9.4	11
93	Microporous Nature of Ce,Zr-Doped Carbon Aerogels. Langmuir, 1999, 15, 7119-7121.	3.5	32
94	CO oxidation on Pd/CeO2â€“ZrO2 catalysts. Catalysis Today, 1998, 45, 179-183.	4.4	146
95	Catalytic Neutralization of NO on a Carbon-Supported Cobalt Oxide Catalyst. Journal of Colloid and Interface Science, 1994, 166, 476-480.	9.4	33
96	Effect of Calcination on Co-Impregnated Active Carbon. Journal of Colloid and Interface Science, 1993, 161, 115-119.	9.4	10
97	Role of triethanolamine in forming Cu 2 ZnSnS 4 nanoparticles during solvothermal processing for solar cell applications. International Journal of Energy Research, 0, , .	4.5	3
98	Patterning Submicron Photomechanical Features into Single Diarylethene Crystals Using Electron Beam Lithography. Nanoscale Horizons, 0, , .	8.0	2