

# Florian Banhart

## List of Publications by Year in descending order

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177  
papers

16,564  
citations

28190

55  
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14702

127  
g-index

182  
all docs

182  
docs citations

182  
times ranked

17138  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Defects in Graphene. ACS Nano, 2011, 5, 26-41.	7.3	2,818
2	Irradiation effects in carbon nanostructures. Reports on Progress in Physics, 1999, 62, 1181-1221.	8.1	981
3	Spongy Graphene as a Highly Efficient and Recyclable Sorbent for Oils and Organic Solvents. Advanced Functional Materials, 2012, 22, 4421-4425.	7.8	925
4	Engineering of nanostructured carbon materials with electron or ion beams. Nature Materials, 2007, 6, 723-733.	13.3	898
5	Carbon onions as nanoscopic pressure cells for diamond formation. Nature, 1996, 382, 433-435.	13.7	684
6	Molecular Junctions by Joining Single-Walled Carbon Nanotubes. Physical Review Letters, 2002, 89, 075505.	2.9	656
7	Coalescence of Single-Walled Carbon Nanotubes. Science, 2000, 288, 1226-1229.	6.0	469
8	N-doping and coalescence of carbon nanotubes: synthesis and electronic properties. Applied Physics A: Materials Science and Processing, 2002, 74, 355-361.	1.1	392
9	One- and Two-Dimensional Diffusion of Metal Atoms in Graphene. Small, 2008, 4, 587-591.	5.2	370
10	Primary radiation damage: A review of current understanding and models. Journal of Nuclear Materials, 2018, 512, 450-479.	1.3	358
11	Migration and Localization of Metal Atoms on Strained Graphene. Physical Review Letters, 2010, 105, 196102.	2.9	304
12	Carbon Nanotubes as High-Pressure Cylinders and Nanoextruders. Science, 2006, 312, 1199-1202.	6.0	283
13	Trapping of Metal Atoms in Vacancies of Carbon Nanotubes and Graphene. ACS Nano, 2010, 4, 3422-3428.	7.3	261
14	Improving atomic displacement and replacement calculations with physically realistic damage models. Nature Communications, 2018, 9, 1084.	5.8	241
15	In situ nucleation of carbon nanotubes by the injection of carbon atoms into metal particles. Nature Nanotechnology, 2007, 2, 307-311.	15.6	226
16	Micellar Nanoreactors—Preparation and Characterization of Hexagonally Ordered Arrays of Metallic Nanodots. Advanced Functional Materials, 2003, 13, 853-861.	7.8	216
17	Low Temperature Casting of Graphene with High Compressive Strength. Advanced Materials, 2012, 24, 5124-5129.	11.1	208
18	Interactions between metals and carbon nanotubes: at the interface between old and new materials. Nanoscale, 2009, 1, 201.	2.8	203

#	ARTICLE	IF	CITATIONS
19	The Formation of a Connection between Carbon Nanotubes in an Electron Beam. Nano Letters, 2001, 1, 329-332.	4.5	198
20	Electrical Transport Measured in Atomic Carbon Chains. Nano Letters, 2013, 13, 3487-3493.	4.5	192
21	The formation, annealing and self-compression of carbon onions under electron irradiation. Chemical Physics Letters, 1997, 269, 349-355.	1.2	175
22	Graphene Growth by a Metal-Catalyzed Solid-State Transformation of Amorphous Carbon. ACS Nano, 2011, 5, 1529-1534.	7.3	151
23	Stability of carbon nanotubes under electron irradiation: Role of tube diameter and chirality. Physical Review B, 2005, 72, .	1.1	146
24	Ion-irradiation-induced welding of carbon nanotubes. Physical Review B, 2002, 66, .	1.1	144
25	Formation of face-centered-cubic titanium by mechanical attrition. Journal of Applied Physics, 2003, 93, 1520-1524.	1.1	143
26	Creation of Individual Vacancies in Carbon Nanotubes by Using an Electron Beam of 1 Å... Diameter. Nano Letters, 2009, 9, 2285-2289.	4.5	141
27	Epitaxy of cubic boron nitride on (001)-oriented diamond. Nature Materials, 2003, 2, 312-315.	13.3	133
28	Radiation-Induced Transformation of Graphite to Diamond. Physical Review Letters, 1997, 79, 3680-3683.	2.9	131
29	Strain-induced metal-semiconductor transition observed in atomic carbon chains. Nature Communications, 2015, 6, 6636.	5.8	126
30	The transformation of graphitic onions to diamond under electron irradiation. Journal of Applied Physics, 1997, 81, 3440-3445.	1.1	122
31	The Engineering of Hot Carbon Nanotubes with a Focused Electron Beam. Nano Letters, 2004, 4, 1143-1146.	4.5	121
32	Carbon nanotubes under electron irradiation: Stability of the tubes and their action as pipes for atom transport. Physical Review B, 2005, 71, .	1.1	121
33	Heterojunctions between metals and carbon nanotubes as ultimate nanocontacts. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4591-4595.	3.3	110
34	Dynamic Behavior of Nickel Atoms in Graphitic Networks. Physical Review Letters, 2000, 84, 686-689.	2.9	108
35	Reactive Ion Etching of Cylindrical Polyferrocenylsilane Block Copolymer Micelles: Fabrication of Ceramic Nanolines on Semiconducting Substrates. Advanced Functional Materials, 2003, 13, 271-276.	7.8	105
36	The migration of metal atoms through carbon onions. Chemical Physics Letters, 1998, 292, 554-560.	1.2	103

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37	Extreme Superheating and Supercooling of Encapsulated Metals in Fullerenelike Shells. <i>Physical Review Letters</i> , 2003, 90, 185502.	2.9	103
38	On the Systematics of Positron Lifetimes in Metals. <i>Physica Status Solidi A</i> , 1987, 102, 171-179.	1.7	99
39	Formation of diamond in carbon onions under MeV ion irradiation. <i>Applied Physics Letters</i> , 1997, 71, 1948-1950.	1.5	96
40	Cutting Single-Walled Carbon Nanotubes with an Electron Beam: Evidence for Atom Migration Inside Nanotubes. <i>Small</i> , 2005, 1, 953-956.	5.2	93
41	Thermal vacancies and positron-lifetime measurements in Fe <sub>76.3</sub> Al <sub>23.7</sub> . <i>Physical Review B</i> , 1990, 41, 11869-11874.	1.1	92
42	The formation of curled concentric-shell clusters in boron nitride under electron irradiation. <i>Chemical Physics Letters</i> , 1994, 231, 98-104.	1.2	87
43	Zipper Mechanism of Nanotube Fusion: Theory and Experiment. <i>Physical Review Letters</i> , 2004, 92, 075504.	2.9	78
44	METAL ATOMS IN CARBON NANOTUBES AND RELATED NANOPARTICLES. <i>International Journal of Modern Physics B</i> , 2001, 15, 4037-4069.	1.0	70
45	Plastic Deformation of Single Nanometer-Sized Crystals. <i>Physical Review Letters</i> , 2008, 101, 156101.	2.9	70
46	Formation of face-centered-cubic zirconium by mechanical attrition. <i>Applied Physics Letters</i> , 2002, 81, 4136-4138.	1.5	69
47	Electronic and Magnetic Properties of Ligand-Free FePt Nanoparticles. <i>Advanced Materials</i> , 2005, 17, 574-578.	11.1	67
48	Chains of carbon atoms: A vision or a new nanomaterial?. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 559-569.	1.5	67
49	In situ observation of the formation and stability of single fullerene molecules under electron irradiation. <i>Chemical Physics Letters</i> , 1996, 254, 372-378.	1.2	66
50	Enhanced Thermal Stability of Gold and Silver Nanorods by Thin Surface Layers. <i>Journal of Physical Chemistry C</i> , 2007, 111, 12886-12889.	1.5	64
51	Multibranching Junctions of Carbon Nanotubes via Cobalt Particles. <i>Advanced Materials</i> , 2009, 21, 4477-4482.	11.1	63
52	Formation and decay of spherical concentric-shell carbon clusters. <i>Journal of Crystal Growth</i> , 1996, 163, 445-454.	0.7	60
53	Irradiation-induced transformation of graphite to diamond: A quantitative study. <i>Physical Review B</i> , 2000, 62, 3058-3064.	1.1	59
54	Electron beam dynamics in an ultrafast transmission electron microscope with Wehnelt electrode. <i>Ultramicroscopy</i> , 2016, 171, 8-18.	0.8	59

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55	Semiconductor nanostructures defined with self-organizing polymers. Journal of Applied Physics, 2002, 91, 6057-6059.	1.1	58
56	Characterization of ion-irradiation-induced defects in multi-walled carbon nanotubes. New Journal of Physics, 2011, 13, 073004.	1.2	55
57	Microscopic bimetallic actuator based on a bilayer of graphene and graphene oxide. Nanoscale, 2013, 5, 9123.	2.8	54
58	Two-dimensional materials under electron irradiation. MRS Bulletin, 2015, 40, 29-37.	1.7	54
59	Irradiation of carbon nanotubes with a focused electron beam in the electron microscope. Journal of Materials Science, 2006, 41, 4505-4511.	1.7	53
60	In Situ Heating TEM Study of Onion-like WS <sub>2</sub> and MoS <sub>2</sub> Nanostructures Obtained via MOCVD. Chemistry of Materials, 2008, 20, 65-71.	3.2	52
61	Thermal Vacancies in the Noble Metals Cu, Ag, Au and in Pt Studied by Positron Lifetime Spectroscopy. Materials Science Forum, 1987, 15-18, 117-124.	0.3	48
62	EELS study of the irradiation-induced compression of carbon onions and their transformation to diamond. Carbon, 1998, 36, 561-563.	5.4	48
63	Low-pressure transformation of graphite to diamond under irradiation. Applied Physics Letters, 1999, 74, 659-660.	1.5	47
64	Graphitization Mechanism during the Carbon-Nanotube Formation Based on the In-Situ HRTEM Observation. Journal of Physical Chemistry B, 2002, 106, 1849-1852.	1.2	46
65	Anomalous high capacitance in a coaxial single nanowire capacitor. Nature Communications, 2012, 3, 879.	5.8	45
66	A highly N-doped carbon phase "dressing" of macroscopic supports for catalytic applications. Chemical Communications, 2015, 51, 14393-14396.	2.2	43
67	The diffusion of carbon atoms inside carbon nanotubes. New Journal of Physics, 2008, 10, 023022.	1.2	42
68	Migration of gold atoms in graphene ribbons: Role of the edges. Physical Review B, 2010, 81, .	1.1	41
69	Laplacian growth of amorphous carbon filaments in a non-diffusion-limited experiment. Physical Review E, 1995, 52, 5156-5160.	0.8	40
70	Formation and transformation of carbon nanoparticles under electron irradiation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 2205-2222.	1.6	39
71	Strong bundles. Nature Materials, 2004, 3, 135-136.	13.3	36
72	Adhesion in growth of defect-free silicon over silicon oxide. Journal of Applied Physics, 1996, 80, 4101-4107.	1.1	35

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73	Massive Icosahedral Boron Carbide Crystals. <i>Journal of Physical Chemistry B</i> , 2002, 106, 5807-5809.	1.2	35
74	Functionalized single-walled carbon nanotubes containing traces of iron as new negative MRI contrast agents for <i>in vivo</i> imaging. <i>Contrast Media and Molecular Imaging</i> , 2012, 7, 153-159.	0.4	35
75	Microstructure of the intermediate turbostratic boron nitride layer. <i>Diamond and Related Materials</i> , 2005, 14, 1474-1481.	1.8	34
76	The structure of concentric-shell carbon onions as determined by high-resolution electron microscopy. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1995, 72, 149-157.	0.6	32
77	Self-compression and diamond formation in carbon onions. <i>Advanced Materials</i> , 1997, 9, 261-263.	11.1	32
78	Cobalt Nanoparticle-Assisted Engineering of Multiwall Carbon Nanotubes. <i>ACS Nano</i> , 2009, 3, 2632-2638.	7.3	32
79	<i>In Situ</i> Growth of Cellular Two-Dimensional Silicon Oxide on Metal Substrates. <i>ACS Nano</i> , 2013, 7, 5175-5180.	7.3	31
80	Structural transformations in carbon nanoparticles induced by electron irradiation. <i>Physics of the Solid State</i> , 2002, 44, 399-404.	0.2	30
81	In Situ TEM Observation of MgO Nanorod Growth. <i>Crystal Growth and Design</i> , 2010, 10, 414-417.	1.4	30
82	Growth of Single-Walled Carbon Nanotubes from Sharp Metal Tips. <i>Small</i> , 2009, 5, 2710-2715.	5.2	29
83	Creating the Smallest BN Nanotube from Bilayer hBN. <i>Advanced Functional Materials</i> , 2017, 27, 1603897.	7.8	28
84	Making junctions between carbon nanotubes using an ion beam. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2003, 202, 224-229.	0.6	27
85	Strains in crystals with amorphous surface films studied by convergent beam electron diffraction and high-resolution imaging. <i>Ultramicroscopy</i> , 1994, 56, 233-240.	0.8	26
86	Growth studies of Ge-islands for enhanced performance of thin film solar cells. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 89, 160-165.	1.7	26
87	Fractal carbon filaments grown on insulators under irradiation in an electron microscope. <i>Philosophical Magazine Letters</i> , 1994, 69, 45-51.	0.5	25
88	Quasi-2D Cu <sub>2</sub> S Crystals on Graphene: <i>In situ</i> Growth and <i>ab initio</i> Calculations. <i>Small</i> , 2015, 11, 1253-1257.	5.2	25
89	The coalescence of silicon layers grown over SiO <sub>2</sub> by liquid-phase epitaxy. <i>Applied Physics A: Solids and Surfaces</i> , 1993, 57, 249-254.	1.4	24
90	Development of amorphous and nanocrystalline Al <sub>65</sub> Cu <sub>35</sub> xZrx alloys by mechanical alloying. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 379, 360-365.	2.6	24

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91	The Mobility of Carbon Atoms in Graphitic Nanoparticles Studied by the Relaxation of Strain in Carbon Onions. <i>Advanced Materials</i> , 2008, 20, 4751-4754.	11.1	24
92	Electrical transport through atomic carbon chains: The role of contacts. <i>Carbon</i> , 2017, 122, 92-97.	5.4	24
93	The Deformation of Single, Nanometer-Sized Metal Crystals in Graphitic Shells. <i>Advanced Materials</i> , 2005, 17, 1539-1542.	11.1	23
94	Growth of cubic boron nitride films on Si by ion beam assisted deposition at the high temperatures. <i>Diamond and Related Materials</i> , 2004, 13, 473-481.	1.8	22
95	Elastic deformation of nanometer-sized metal crystals in graphitic shells. <i>Applied Physics Letters</i> , 2006, 89, 263104.	1.5	22
96	Graphitic onions as reaction cells on the nanoscale. <i>Applied Physics Letters</i> , 2006, 88, 193121.	1.5	21
97	Electron beam-induced formation and displacement of metal clusters on graphene, carbon nanotubes and amorphous carbon. <i>Carbon</i> , 2012, 50, 259-264.	5.4	21
98	Damage-free reactive ion etching of silicon in NF <sub>3</sub> at low temperature. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1989, 4, 265-268.	1.7	20
99	Dislocation generation in silicon grown laterally over SiO <sub>2</sub> by liquid phase epitaxy. <i>Applied Physics A: Solids and Surfaces</i> , 1991, 53, 317-323.	1.4	20
100	Growth mechanism for epitaxial cubic boron nitride films on diamond substrates by ion beam assisted deposition. <i>Diamond and Related Materials</i> , 2004, 13, 1144-1148.	1.8	20
101	Heteroepitaxial growth of cubic boron nitride films on single-crystalline (001) diamond substrates. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 80, 735-738.	1.1	20
102	Electron Beam Etching of CaO Crystals Observed Atom by Atom. <i>Nano Letters</i> , 2017, 17, 5119-5125.	4.5	20
103	Influence of cooling rate on the dislocations and related luminescence in LPE SiGe layers grown on Si (100) substrates. <i>Thin Solid Films</i> , 2000, 372, 1-5.	0.8	19
104	Synthesis of SWCNT Rings Made by Two Y Junctions and Possible Applications in Electron Interferometry. <i>Small</i> , 2007, 3, 1900-1905.	5.2	19
105	Defect-induced junctions between single- or double-wall carbon nanotubes and metal crystals. <i>Nanoscale</i> , 2010, 2, 901.	2.8	19
106	Engineering the Atomic Structure of Carbon Nanotubes by a Focused Electron Beam: New Morphologies at the Sub-Nanometer Scale. <i>ChemPhysChem</i> , 2012, 13, 2596-2600.	1.0	19
107	The coalescence of silicon layers grown over SiO <sub>2</sub> by liquid-phase epitaxy. <i>Applied Physics A: Solids and Surfaces</i> , 1993, 57, 441-448.	1.4	18
108	Formation and characterization of carbon-metal nano-contacts. <i>Carbon</i> , 2014, 77, 906-911.	5.4	18

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109	Formation Mechanism of Carbon-Nanocapsules and -Nanoparticles Based on the In-Situ Observation. <i>Journal of Physical Chemistry B</i> , 2002, 106, 1247-1251.	1.2	17
110	Ion irradiation of multi-walled boron nitride nanotubes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, 1256-1259.	0.8	17
111	Imaging and electron energy-loss spectroscopy using single nanosecond electron pulses. <i>Ultramicroscopy</i> , 2018, 188, 41-47.	0.8	17
112	Nanosecond electron pulses in the analytical electron microscopy of a fast irreversible chemical reaction. <i>Nature Communications</i> , 2019, 10, 3648.	5.8	17
113	Solid state synthesis of amorphous and/or nanocrystalline Al <sub>40</sub> Zr <sub>40</sub> Si <sub>20</sub> alloy by mechanical alloying. <i>Materials Letters</i> , 2004, 58, 403-407.	1.3	16
114	Elemental carbon in the sp <sup>1</sup> hybridization. <i>ChemTexts</i> , 2020, 6, 1.	1.0	16
115	Imaging of molecules, lattice and lattice defects in C <sub>60</sub> and C <sub>70</sub> fullerenes by high-resolution electron microscopy. <i>Philosophical Magazine Letters</i> , 1992, 65, 283-289.	0.5	15
116	Low-temperature ohmic Au/Sb contacts on n-type Si. <i>Journal of Applied Physics</i> , 1994, 75, 994-997.	1.1	15
117	Microstructural evolution of wear-resistant FeCrB and FeCrNiCoB coating alloys during high-energy mechanical attrition. <i>Wear</i> , 2008, 264, 940-946.	1.5	15
118	Photo-thermal Switching of Individual Plasmonically Activated Spin Crossover Nanoparticle Imaged by Ultrafast Transmission Electron Microscopy. <i>Advanced Materials</i> , 2021, 33, e2105586.	11.1	15
119	Experimental observation and quantum modeling of electron irradiation on single-wall carbon nanotubes. <i>IEEE Nanotechnology Magazine</i> , 2003, 2, 349-354.	1.1	14
120	Convergent-beam electron diffraction studies of epitaxial Si/SiO <sub>2</sub> systems. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1994, 70, 341-357.	0.8	13
121	The role of lattice defects in the formation of new carbon structures under electron irradiation. <i>Journal of Electron Microscopy</i> , 2002, 51, S189-S194.	0.9	13
122	Sub-4 nm Nanodiamonds from Graphene-Oxide and Nitrated Polycyclic Aromatic Hydrocarbons at 423 K. <i>ACS Nano</i> , 2021, 15, 17392-17400.	7.3	13
123	Solution growth of epitaxial semiconductor-on-insulator layers. <i>Journal of Crystal Growth</i> , 1996, 166, 727-730.	0.7	12
124	Ion beam assisted growth of c-BN films on top of c-BN substrates – a HRTEM study. <i>Diamond and Related Materials</i> , 2002, 11, 38-42.	1.8	12
125	The Study of Positron Diffusion in Solids by Positron Spin Relaxation (e+SR) Experiments. <i>Physica Status Solidi A</i> , 1987, 102, 91-106.	1.7	11
126	Ion irradiation of carbon nanotubes encapsulating cobalt crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 2618-2621.	1.3	11



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127	Towards nanoprinting with metals on graphene. <i>Nature Communications</i> , 2015, 6, 8071.	5.8	11
128	Structural, morphological, electrical and luminous properties of undoped micro/nanocrystalline silicon films deposited by ion-assisted beam deposition techniques. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1996, 112, 289-293.	0.6	10
129	Alliage nanocrystallin Fe-1 %pds C obtenu par torsion sous haute pression de poudres prÃ©parÃ©es par broyage. <i>Annales De Chimie: Science Des Materiaux</i> , 2002, 27, 45-53.	0.2	10
130	Anomalous behavior of gold nanoislands on top of SrTiO <sub>3</sub> (001) during their overgrowth by thin YBaCuO films. <i>Physica C: Superconductivity and Its Applications</i> , 2003, 390, 175-184.	0.6	10
131	Thermal equilibrium vacancies in platinum studied by positron annihilation. <i>Physica Status Solidi A</i> , 1987, 104, 263-272.	1.7	9
132	Defect distribution and morphology development of SiGe layers grown on Si(100) substrates by LPE. <i>Thin Solid Films</i> , 1998, 336, 116-119.	0.8	9
133	Solid state synthesis of Al-based amorphous and nanocrystalline Alâ€“Nbâ€“Si and Alâ€“Zrâ€“Si alloys. <i>International Journal of Materials Research</i> , 2003, 94, 835-841.	0.8	9
134	Microstructural aspects and positron annihilation study on solid state synthesis of amorphous and nanocrystalline Al <sub>60</sub> âˆ™xTi <sub>40</sub> Si <sub>6</sub> alloys prepared by mechanical alloying. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 2485-2492.	1.5	9
135	The potentials and challenges of electron microscopy in the study of atomic chains. <i>EPJ Applied Physics</i> , 2017, 78, 20701.	0.3	9
136	The amorphization of metal nanoparticles in graphitic shells under laser pulses. <i>Carbon</i> , 2020, 161, 495-501.	5.4	9
137	The critical thickness of silicon-germanium layers grown by liquid phase epitaxy. <i>Applied Physics A: Materials Science and Processing</i> , 1999, 69, 597-603.	1.1	8
138	Determination of the Mechanical Properties of Nanocrystalline Fe-Cr-Based Thermal Spray Coatings. <i>Materials Science Forum</i> , 2002, 386-388, 571-576.	0.3	8
139	Doping and connecting carbon nanotubes. <i>Molecular Crystals and Liquid Crystals</i> , 2002, 387, 51-62.	0.4	8
140	Growth studies of Ge-islands for enhanced performance of thin film solar cells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 14, 249-254.	1.3	8
141	Interface reactions in [Fe/B] n multilayers: a way to tune from crystalline/amorphous layer sequences to homogeneous amorphous Fe x B 100-x films. <i>Applied Physics A: Materials Science and Processing</i> , 2003, 76, 5-13.	1.1	8
142	Growth of multi-crystalline silicon on seeded glass from metallic solutions. <i>Materials Letters</i> , 1996, 28, 87-91.	1.3	7
143	Stress relaxation in SiGe layers grown on oxideâ€“patterned Si substrates. <i>Journal of Applied Physics</i> , 1996, 80, 6223-6228.	1.1	7
144	Catalytic Action of Gold and Copper Crystals in the Growth of Carbon Nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 3609-3615.	0.9	7

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145	Solid-State Growth of One- and Two-Dimensional Silica Structures on Metal Surfaces. Journal of Physical Chemistry C, 2014, 118, 21001-21005.	1.5	7
146	In situ observation of atomic-scale stability limit of Cu nanoparticles. Materials Today Nano, 2018, 4, 32-37.	2.3	7
147	Diamantbildung in "Kohlenstoffzwiebeln"; Fullerencluster als nanoskopische Druckzellen. Physik Journal, 1997, 53, 33-35.	0.1	6
148	Twisted within nanotubes. Nature Materials, 2011, 10, 651-652.	13.3	6
149	The formation of the smallest fullerene-like carbon cages on metal surfaces. Nanoscale, 2016, 8, 2561-2567.	2.8	6
150	Surface Morphology of LPE SiGe Layers Grown on (100) Si Substrates. Materials Research Society Symposia Proceedings, 1997, 485, 19.	0.1	5
151	Electron microscopy study of carbon onions synthesized by ion implantation. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 1509-1520.	0.8	5
152	Carbon nanotubes as elements to focus electron beams by Fresnel diffraction. Applied Physics Letters, 2003, 83, 5056-5058.	1.5	5
153	Growth of single-layer boron nitride dome-shaped nanostructures catalysed by iron clusters. Nanoscale, 2016, 8, 15079-15085.	2.8	5
154	SiGe layer structures for solar cell application grown by liquid phase epitaxy. , 0, , .		4
155	Local lattice distortions in spherical carbon nanoparticles as studied by HRTEM image analysis. Ultramicroscopy, 2002, 92, 209-213.	0.8	4
156	Functional Nanomaterials and Their Applications: From Origins to Unanswered Questions. ChemPhysChem, 2012, 13, 2423-2425.	1.0	4
157	Centrifugal techniques for solution growth of semiconductor layers. Journal of Crystal Growth, 1996, 166, 234-238.	0.7	3
158	How to exploit ion-induced stress relaxation to grow thick c-BN films. Pure and Applied Chemistry, 2002, 74, 489-492.	0.9	3
159	Wrapping Bacteria in Graphene. ChemPhysChem, 2011, 12, 1637-1639.	1.0	3
160	Investigating the Thermostability of Succinate: Quinone Oxidoreductase Enzymes by Direct Electrochemistry at SWNTs-Modified Electrodes and FTIR Spectroscopy. ChemPhysChem, 2014, 15, 3572-3579.	1.0	3
161	Extremely Low Temperature Silicon Liquid Phase Epitaxy. Materials Research Society Symposia Proceedings, 1995, 386, 339.	0.1	2
162	Semiconductor Epitaxial and Nonepitaxial Overgrowth from Solutions. Materials Research Society Symposia Proceedings, 1995, 399, 189.	0.1	2

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163	Determination of the Mechanical Properties of Nanocrystalline Fe-Cr-Based Thermal Spray Coatings. Journal of Metastable and Nanocrystalline Materials, 2002, 13, 571-576.	0.1	2
164	Banhart, Hernández, and Terrones Reply:. Physical Review Letters, 2004, 92, .	2.9	2
165	Electron beam-induced nanopatterning of multilayer graphene and amorphous carbon films with metal layers. Applied Physics Letters, 2011, 98, 183105.	1.5	2
166	Defect-Free Coalescence of Silicon Layers Over SiO <sub>2</sub> . Materials Research Society Symposia Proceedings, 1993, 317, 263.	0.1	1
167	Temperature-dependence of the Frank-Read source in Si. Computational Materials Science, 1996, 7, 181-186.	1.4	1
168	Defects and coalescence in carbon nanotubes. AIP Conference Proceedings, 2001, , .	0.3	1
169	Semiconductor Nanostructures defined by self-organizing Polymers. Materials Research Society Symposia Proceedings, 2002, 728, 3101.	0.1	1
170	Electron microscopy study of carbon onions synthesized by ion implantation. , 0, .		1
171	Electron Irradiation Effects in Carbon Nanostructures: Surface Reconstruction, Extreme Compression, Nanotube Growth and Morphology Manipulation. , 2008, , 155-156.		1
172	Dynamic Interfaces In Carbon Nanostructures. Microscopy and Microanalysis, 1999, 5, 140-141.	0.2	0
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