## Florian Banhart

# List of Publications by Year in Descending Order

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14,475 119 174 53 h-index g-index citations papers 182 6.77 15,522 7.9 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
174	Photo-Thermal Switching of Individual Plasmonically Activated Spin Crossover Nanoparticle Imaged by Ultrafast Transmission Electron Microscopy. <i>Advanced Materials</i> , <b>2021</b> , e2105586	24	2
173	Sub-4 nm Nanodiamonds from Graphene-Oxide and Nitrated Polycyclic Aromatic Hydrocarbons at 423 K. <i>ACS Nano</i> , <b>2021</b> ,	16.7	2
172	The amorphization of metal nanoparticles in graphitic shells under laser pulses. <i>Carbon</i> , <b>2020</b> , 161, 495-	·5 <b>0</b> 01.4	3
171	Elemental carbon in the sp1 hybridization. <i>ChemTexts</i> , <b>2020</b> , 6, 1	2.2	5
170	Nanosecond electron pulses in the analytical electron microscopy of a fast irreversible chemical reaction. <i>Nature Communications</i> , <b>2019</b> , 10, 3648	17.4	10
169	Improving atomic displacement and replacement calculations with physically realistic damage models. <i>Nature Communications</i> , <b>2018</b> , 9, 1084	17.4	146
168	Imaging and electron energy-loss spectroscopy using single nanosecond electron pulses. <i>Ultramicroscopy</i> , <b>2018</b> , 188, 41-47	3.1	9
167	Imaging and Electron Energy-Loss Spectroscopy with Single Nanosecond Electron Pulses. <i>Microscopy and Microanalysis</i> , <b>2018</b> , 24, 1960-1961	0.5	
166	In situ observation of atomic-scale stability limit of Cu nanoparticles. <i>Materials Today Nano</i> , <b>2018</b> , 4, 32-	3 <i>]</i> 7.7	6
165	Primary radiation damage: A review of current understanding and models. <i>Journal of Nuclear Materials</i> , <b>2018</b> , 512, 450-479	3.3	208
164	Electrical transport through atomic carbon chains: The role of contacts. <i>Carbon</i> , <b>2017</b> , 122, 92-97	10.4	21
163	Electron Beam Etching of CaO Crystals Observed Atom by Atom. <i>Nano Letters</i> , <b>2017</b> , 17, 5119-5125	11.5	13
162	Creating the Smallest BN Nanotube from Bilayer h-BN. Advanced Functional Materials, 2017, 27, 160389	715.6	20
161	The potentials and challenges of electron microscopy in the study of atomic chains. <i>EPJ Applied Physics</i> , <b>2017</b> , 78, 20701	1.1	4
160	Electron beam dynamics in an ultrafast transmission electron microscope with Wehnelt electrode. <i>Ultramicroscopy</i> , <b>2016</b> , 171, 8-18	3.1	40
159	Growth of single-layer boron nitride dome-shaped nanostructures catalysed by iron clusters. <i>Nanoscale</i> , <b>2016</b> , 8, 15079-85	7.7	1
158	Electrical properties of atomic carbon chains measured by in-situ TEM <b>2016</b> , 392-393		

157	The formation of the smallest fullerene-like carbon cages on metal surfaces. <i>Nanoscale</i> , <b>2016</b> , 8, 2561-7	7.7	6
156	In-situ TEM study of the formation of the smallest possible fullerenes on metal surfaces <b>2016</b> , 494-495		
155	A highly N-doped carbon phase "dressing" of macroscopic supports for catalytic applications. <i>Chemical Communications</i> , <b>2015</b> , 51, 14393-6	5.8	30
154	Two-dimensional materials under electron irradiation. MRS Bulletin, 2015, 40, 29-37	3.2	45
153	Towards nanoprinting with metals on graphene. <i>Nature Communications</i> , <b>2015</b> , 6, 8071	17.4	9
152	Quasi-2D Cu2 S crystals on graphene: in-situ growth and ab-initio calculations. <i>Small</i> , <b>2015</b> , 11, 1253-7	11	20
151	Strain-induced metal-semiconductor transition observed in atomic carbon chains. <i>Nature Communications</i> , <b>2015</b> , 6, 6636	17.4	100
150	Chains of carbon atoms: A vision or a new nanomaterial?. <i>Beilstein Journal of Nanotechnology</i> , <b>2015</b> , 6, 559-69	3	58
149	Solid-State Growth of One- and Two-Dimensional Silica Structures on Metal Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 21001-21005	3.8	6
148	Formation and characterization of carbonthetal nano-contacts. <i>Carbon</i> , <b>2014</b> , 77, 906-911	10.4	12
147	Investigating the thermostability of succinate: quinone oxidoreductase enzymes by direct electrochemistry at SWNTs-modified electrodes and FTIR spectroscopy. <i>ChemPhysChem</i> , <b>2014</b> , 15, 3572	2-3g-2	2
146	Microscopic bimetallic actuator based on a bilayer of graphene and graphene oxide. <i>Nanoscale</i> , <b>2013</b> , 5, 9123-8	7.7	43
145	Electrical transport measured in atomic carbon chains. <i>Nano Letters</i> , <b>2013</b> , 13, 3487-93	11.5	169
144	In situ growth of cellular two-dimensional silicon oxide on metal substrates. ACS Nano, 2013, 7, 5175-80	16.7	28
143	Electron and Ion Irradiation <b>2012</b> , 123-143		1
142	Anomalous high capacitance in a coaxial single nanowire capacitor. <i>Nature Communications</i> , <b>2012</b> , 3, 879	917.4	42
141	Spongy Graphene as a Highly Efficient and Recyclable Sorbent for Oils and Organic Solvents. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 4421-4425	15.6	833
140	Low temperature casting of graphene with high compressive strength. <i>Advanced Materials</i> , <b>2012</b> , 24, 5124-9, 5123	24	179

139	Functionalized single-walled carbon nanotubes containing traces of iron as new negative MRI contrast agents for in vivo imaging. <i>Contrast Media and Molecular Imaging</i> , <b>2012</b> , 7, 153-9	3.2	30
138	Engineering the atomic structure of carbon nanotubes by a focused electron beam: new morphologies at the sub-nanometer scale. <i>ChemPhysChem</i> , <b>2012</b> , 13, 2596-600	3.2	15
137	Electron beam-induced formation and displacement of metal clusters on graphene, carbon nanotubes and amorphous carbon. <i>Carbon</i> , <b>2012</b> , 50, 259-264	10.4	18
136	Characterization of ion-irradiation-induced defects in multi-walled carbon nanotubes. <i>New Journal of Physics</i> , <b>2011</b> , 13, 073004	2.9	41
135	Catalytic action of gold and copper crystals in the growth of carbon nanotubes. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2011</b> , 11, 3609-15	1.3	7
134	Structural defects in graphene. ACS Nano, <b>2011</b> , 5, 26-41	16.7	2388
133	Graphene growth by a metal-catalyzed solid-state transformation of amorphous carbon. <i>ACS Nano</i> , <b>2011</b> , 5, 1529-34	16.7	127
132	Wrapping bacteria in graphene. <i>ChemPhysChem</i> , <b>2011</b> , 12, 1637-9	3.2	3
131	Electron beam-induced nanopatterning of multilayer graphene and amorphous carbon films with metal layers. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 183105	3.4	2
130	Migration of gold atoms in graphene ribbons: Role of the edges. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	39
129	In Situ TEM Observation of MgO Nanorod Growth. Crystal Growth and Design, 2010, 10, 414-417	3.5	29
128	Trapping of metal atoms in vacancies of carbon nanotubes and graphene. ACS Nano, 2010, 4, 3422-8	16.7	244
127	Defect-induced junctions between single- or double-wall carbon nanotubes and metal crystals. <i>Nanoscale</i> , <b>2010</b> , 2, 901-5	7.7	18
126	Migration and localization of metal atoms on strained graphene. <i>Physical Review Letters</i> , <b>2010</b> , 105, 196	51,0,2	281
125	Ion irradiation of multi-walled boron nitride nanotubes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, NA-NA		10
124	Multibranched Junctions of Carbon Nanotubes via Cobalt Particles. <i>Advanced Materials</i> , <b>2009</b> , 21, 4477-	-4 <u>4</u> β2	60
123	Growth of single-walled carbon nanotubes from sharp metal tips. <i>Small</i> , <b>2009</b> , 5, 2710-5	11	24
122	Cobalt nanoparticle-assisted engineering of multiwall carbon nanotubes. <i>ACS Nano</i> , <b>2009</b> , 3, 2632-8	16.7	26

### (2006-2009)

121	Interactions between metals and carbon nanotubes: at the interface between old and new materials. <i>Nanoscale</i> , <b>2009</b> , 1, 201-13	7.7	174
120	Creation of individual vacancies in carbon nanotubes by using an electron beam of 1 A diameter. <i>Nano Letters</i> , <b>2009</b> , 9, 2285-9	11.5	133
119	Heterojunctions between metals and carbon nanotubes as ultimate nanocontacts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 4591-5	11.5	100
118	In Situ Heating TEM Study of Onion-like WS2 and MoS2 Nanostructures Obtained via MOCVD. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 65-71	9.6	46
117	The diffusion of carbon atoms inside carbon nanotubes. New Journal of Physics, 2008, 10, 023022	2.9	38
116	Plastic deformation of single nanometer-sized crystals. <i>Physical Review Letters</i> , <b>2008</b> , 101, 156101	7.4	59
115	One- and two-dimensional diffusion of metal atoms in graphene. <i>Small</i> , <b>2008</b> , 4, 587-91	11	344
114	The Mobility of Carbon Atoms in Graphitic Nanoparticles Studied by the Relaxation of Strain in Carbon Onions. <i>Advanced Materials</i> , <b>2008</b> , 20, 4751-4754	24	21
113	Ion irradiation of carbon nanotubes encapsulating cobalt crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2008</b> , 40, 2618-2621	3	10
112	Microstructural evolution of wear-resistant FeCrB and FeCrNiCoB coating alloys during high-energy mechanical attrition. <i>Wear</i> , <b>2008</b> , 264, 940-946	3.5	14
111	In-situ electron irradiation studies of metal-carbon nanostructures 2008, 121-122		
110	Electron Irradiation Effects in Carbon Nanostructures: Surface Reconstruction, Extreme Compression, Nanotube Growth and Morphology Manipulation <b>2008</b> , 155-156		
109	Synthesis of SWCNT rings made by two Y junctions and possible applications in electron interferometry. <i>Small</i> , <b>2007</b> , 3, 1900-5	11	15
108	Engineering of nanostructured carbon materials with electron or ion beams. <i>Nature Materials</i> , <b>2007</b> , 6, 723-33	27	829
107	In situ nucleation of carbon nanotubes by the injection of carbon atoms into metal particles. <i>Nature Nanotechnology</i> , <b>2007</b> , 2, 307-11	28.7	195
106	Enhanced Thermal Stability of Gold and Silver Nanorods by Thin Surface Layers. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 12886-12889	3.8	55
105	Elastic deformation of nanometer-sized metal crystals in graphitic shells. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 263104	3.4	18
104	Carbon nanotubes as high-pressure cylinders and nanoextruders. <i>Science</i> , <b>2006</b> , 312, 1199-202	33.3	243

103	Graphitic onions as reaction cells on the nanoscale. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 193121	3.4	20
102	Irradiation of carbon nanotubes with a focused electron beam in the electron microscope. <i>Journal of Materials Science</i> , <b>2006</b> , 41, 4505-4511	4.3	48
101	Stability of carbon nanotubes under electron irradiation: Role of tube diameter and chirality. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	129
100	Microstructure of the intermediate turbostratic boron nitride layer. <i>Diamond and Related Materials</i> , <b>2005</b> , 14, 1474-1481	3.5	28
99	Microstructural aspects and positron annihilation study on solid state synthesis of amorphous and nanocrystalline Al60\text{\text{M}}\text{Ti40Six} alloys prepared by mechanical alloying. <i>Journal of Non-Crystalline Solids</i> , <b>2005</b> , 351, 2485-2492	3.9	9
98	Electronic and Magnetic Properties of Ligand-Free FePt Nanoparticles. <i>Advanced Materials</i> , <b>2005</b> , 17, 574-578	24	61
97	The Deformation of Single, Nanometer-Sized Metal Crystals in Graphitic Shells. <i>Advanced Materials</i> , <b>2005</b> , 17, 1539-1542	24	23
96	Heteroepitaxial growth of cubic boron nitride films on single-crystalline (001) diamond substrates. <i>Applied Physics A: Materials Science and Processing</i> , <b>2005</b> , 80, 735-738	2.6	16
95	Cutting single-walled carbon nanotubes with an electron beam: evidence for atom migration inside nanotubes. <i>Small</i> , <b>2005</b> , 1, 953-6	11	84
94	Carbon nanotubes under electron irradiation: Stability of the tubes and their action as pipes for		
ノエ	atom transport. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	110
93	atom transport. <i>Physical Review B</i> , <b>2005</b> , 71,  Zipper mechanism of nanotube fusion: theory and experiment. <i>Physical Review Letters</i> , <b>2004</b> , 92, 07550		75
93	Zipper mechanism of nanotube fusion: theory and experiment. <i>Physical Review Letters</i> , <b>2004</b> , 92, 07550	04 <sub>7.4</sub>	75
93	Zipper mechanism of nanotube fusion: theory and experiment. <i>Physical Review Letters</i> , <b>2004</b> , 92, 07550 Banhart, Hernfidez, and Terrones Reply:. <i>Physical Review Letters</i> , <b>2004</b> , 92,  Development of amorphous and nanocrystalline Al65Cu35\(\mathbb{Z}\)Zrx alloys by mechanical alloying. <i>Materials Science &amp; Amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i>	7.4 5.3	75
93 92 91	Zipper mechanism of nanotube fusion: theory and experiment. <i>Physical Review Letters</i> , <b>2004</b> , 92, 07550 Banhart, Hernfidez, and Terrones Reply:. <i>Physical Review Letters</i> , <b>2004</b> , 92,  Development of amorphous and nanocrystalline Al65Cu35\(\mathbb{U}\)Zrx alloys by mechanical alloying. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 379, 360-365	7.4 5.3	75 2 21
93 92 91 90	Zipper mechanism of nanotube fusion: theory and experiment. <i>Physical Review Letters</i> , <b>2004</b> , 92, 07550 Banhart, Hernfidez, and Terrones Reply:. <i>Physical Review Letters</i> , <b>2004</b> , 92,  Development of amorphous and nanocrystalline Al65Cu35\(\text{NZ}\)rx alloys by mechanical alloying. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 379, 360-365  The Engineering of Hot Carbon Nanotubes with a Focused Electron Beam. <i>Nano Letters</i> , <b>2004</b> , 4, 1143-Growth mechanism for epitaxial cubic boron nitride films on diamond substrates by ion beam	7.4 7.3 11465	75 2 21 108
93 92 91 90 89	Zipper mechanism of nanotube fusion: theory and experiment. <i>Physical Review Letters</i> , <b>2004</b> , 92, 07550 Banhart, Hernfidez, and Terrones Reply:. <i>Physical Review Letters</i> , <b>2004</b> , 92,  Development of amorphous and nanocrystalline Al65Cu35\( \text{k}\)Zrx alloys by mechanical alloying. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 379, 360-365  The Engineering of Hot Carbon Nanotubes with a Focused Electron Beam. <i>Nano Letters</i> , <b>2004</b> , 4, 1143-Growth mechanism for epitaxial cubic boron nitride films on diamond substrates by ion beam assisted deposition. <i>Diamond and Related Materials</i> , <b>2004</b> , 13, 1144-1148  Formation and transformation of carbon nanoparticles under electron irradiation. <i>Philosophical</i>	7.4 7.4 5.3 11.465	75 2 21 108

#### (2002-2003)

85	Solid state synthesis of Al-based amorphous and nanocrystalline AlbibBi and AldrBi alloys.  International Journal of Materials Research, <b>2003</b> , 94, 835-841		8
84	Interface reactions in [Fe/B]n multilayers: a way to tune from crystalline/amorphous layer sequences to homogeneous amorphous FexB100-x films. <i>Applied Physics A: Materials Science and Processing</i> , <b>2003</b> , 76, 5-13	2.6	6
83	Making junctions between carbon nanotubes using an ion beam. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2003</b> , 202, 224-229	1.2	20
82	Reactive Ion Etching of Cylindrical Polyferrocenylsilane Block Copolymer Micelles: Fabrication of Ceramic Nanolines on Semiconducting Substrates. <i>Advanced Functional Materials</i> , <b>2003</b> , 13, 271-276	15.6	95
81	Micellar Nanoreactors <b>P</b> reparation and Characterization of Hexagonally Ordered Arrays of Metallic Nanodots. <i>Advanced Functional Materials</i> , <b>2003</b> , 13, 853-861	15.6	203
80	Anomalous behavior of gold nanoislands on top of SrTiO3(001) during their overgrowth by thin YBaCuO films. <i>Physica C: Superconductivity and Its Applications</i> , <b>2003</b> , 390, 175-184	1.3	10
79	Epitaxy of cubic boron nitride on (001)-oriented diamond. <i>Nature Materials</i> , <b>2003</b> , 2, 312-5	27	118
78	Formation of face-centered-cubic titanium by mechanical attrition. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 1520-1524	2.5	130
77	. IEEE Nanotechnology Magazine, <b>2003</b> , 2, 349-354	2.6	13
76	Carbon nanotubes as elements to focus electron beams by Fresnel diffraction. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 5056-5058	3.4	5
75	Extreme superheating and supercooling of encapsulated metals in fullerenelike shells. <i>Physical Review Letters</i> , <b>2003</b> , 90, 185502	7.4	91
74	How to exploit ion-induced stress relaxation to grow thick c-BN films. <i>Pure and Applied Chemistry</i> , <b>2002</b> , 74, 489-492	2.1	3
73	N-doping and coalescence of carbon nanotubes: synthesis and electronic properties. <i>Applied Physics A: Materials Science and Processing</i> , <b>2002</b> , 74, 355-361	2.6	367
72	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> , <b>2002</b> , 89, 160-165	3.1	21
71	Growth studies of Ge-islands for enhanced performance of thin film solar cells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 14, 249-254	3	8
70	Local lattice distortions in spherical carbon nanoparticles as studied by HRTEM image analysis. <i>Ultramicroscopy</i> , <b>2002</b> , 92, 209-13	3.1	4
69	Structural transformations in carbon nanoparticles induced by electron irradiation. <i>Physics of the Solid State</i> , <b>2002</b> , 44, 399-404	0.8	24
68	Semiconductor nanostructures defined with self-organizing polymers. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 6057-6059	2.5	54

67	The role of lattice defects in the formation of new carbon structures under electron irradiation. Journal of Electron Microscopy, <b>2002</b> , 51, S189-S194		11
66	Determination of the Mechanical Properties of Nanocrystalline Fe-Cr-Based Thermal Spray Coatings. <i>Materials Science Forum</i> , <b>2002</b> , 386-388, 571-576	0.4	8
65	Doping and connecting carbon nanotubes. <i>Molecular Crystals and Liquid Crystals</i> , <b>2002</b> , 387, 51-62	0.5	6
64	Determination of the Mechanical Properties of Nanocrystalline Fe-Cr-Based Thermal Spray Coatings. <i>Journal of Metastable and Nanocrystalline Materials</i> , <b>2002</b> , 13, 571-576	0.2	2
63	Semiconductor Nanostructures defined by self-organizing Polymers. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 728, 3101		
62	Formation Mechanism of Carbon-Nanocapsules and -Nanoparticles Based on the In-Situ Observation. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 1247-1251	3.4	16
61	Electron microscopy study of carbon onions synthesized by ion implantation. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>2002</b> , 82, 1509-1	520	3
60	Ion-irradiation-induced welding of carbon nanotubes. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	128
59	Molecular junctions by joining single-walled carbon nanotubes. <i>Physical Review Letters</i> , <b>2002</b> , 89, 07550	57.4	584
58	Massive Icosahedral Boron Carbide Crystals. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 5807-5809	3.4	30
57	Graphitization Mechanism during the Carbon-Nanotube Formation Based on the In-Situ HRTEM Observation. <i>Journal of Physical Chemistry B</i> , <b>2002</b> , 106, 1849-1852	3.4	40
56	Alliage nanocrystallin Fe-1 %pds C obtenu par torsion sous haute pression de poudres prþarðs par broyage. <i>Annales De Chimie: Science Des Materiaux</i> , <b>2002</b> , 27, 45-53	2.1	8
55	Formation of face-centered-cubic zirconium by mechanical attrition. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 4136-4138	3.4	60
54	Ion beam assisted growth of c-BN films on top of c-BN substrates <b>(b)</b> HRTEM study. <i>Diamond and Related Materials</i> , <b>2002</b> , 11, 38-42	3.5	12
53	The Formation of a Connection between Carbon Nanotubes in an Electron Beam. <i>Nano Letters</i> , <b>2001</b> , 1, 329-332	11.5	182
52	METAL ATOMS IN CARBON NANOTUBES AND RELATED NANOPARTICLES. <i>International Journal of Modern Physics B</i> , <b>2001</b> , 15, 4037-4069	1.1	60
51	Defects and coalescence in carbon nanotubes. AIP Conference Proceedings, 2001,	O	1
50	Influence of cooling rate on the dislocations and related luminescence in LPE SiGe layers grown on Si (100) substrates. <i>Thin Solid Films</i> , <b>2000</b> , 372, 1-5	2.2	16

#### (1996-2000)

49	Irradiation-induced transformation of graphite to diamond: A quantitative study. <i>Physical Review B</i> , <b>2000</b> , 62, 3058-3064	3.3	55
48	Coalescence of single-walled carbon nanotubes. <i>Science</i> , <b>2000</b> , 288, 1226-9	33.3	425
47	Dynamic behavior of nickel atoms in graphitic networks. <i>Physical Review Letters</i> , <b>2000</b> , 84, 686-9	7.4	103
46	Dynamic Interfaces In Carbon Nanostructures. <i>Microscopy and Microanalysis</i> , <b>1999</b> , 5, 140-141	0.5	
45	Low-pressure transformation of graphite to diamond under irradiation. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 659-660	3.4	42
44	The critical thickness of silicon-germanium layers grown by liquid phase epitaxy. <i>Applied Physics A: Materials Science and Processing</i> , <b>1999</b> , 69, 597-603	2.6	7
43	Irradiation effects in carbon nanostructures. Reports on Progress in Physics, 1999, 62, 1181-1221	14.4	897
42	EELS study of the irradiation-induced compression of carbon onions and their transformation to diamond. <i>Carbon</i> , <b>1998</b> , 36, 561-563	10.4	44
41	The migration of metal atoms through carbon onions. <i>Chemical Physics Letters</i> , <b>1998</b> , 292, 554-560	2.5	96
40	Defect distribution and morphology development of SiGe layers grown on Si(100) substrates by LPE. <i>Thin Solid Films</i> , <b>1998</b> , 336, 116-119	2.2	8
39	Formation of diamond in carbon onions under MeV ion irradiation. <i>Applied Physics Letters</i> , <b>1997</b> , 71, 19	48 <del>,</del> . <b>1</b> 95	<b>0</b> 87
38	Radiation-Induced Transformation of Graphite to Diamond. <i>Physical Review Letters</i> , <b>1997</b> , 79, 3680-368	337.4	122
37	The transformation of graphitic onions to diamond under electron irradiation. <i>Journal of Applied Physics</i> , <b>1997</b> , 81, 3440-3445	2.5	112
36	Surface Morphology of LPE SiGe Layers Grown on (100) Si Substrates. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 485, 19		4
35	Diamantbildung in <b>K</b> ohlenstoffzwiebeln Fullerencluster als nanoskopische Druckzellen. <i>Physik Journal</i> , <b>1997</b> , 53, 33-35		3
34	The formation, annealing and self-compression of carbon onions under electron irradiation. <i>Chemical Physics Letters</i> , <b>1997</b> , 269, 349-355	2.5	158
33	Growth of multi-crystalline silicon on seeded glass from metallic solutions. <i>Materials Letters</i> , <b>1996</b> , 28, 87-91	3.3	6

31	Adhesion in growth of defect-free silicon over silicon oxide. Journal of Applied Physics, 1996, 80, 4101-4	11 <u>0.</u> 7	32
30	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> , <b>1996</b> , 112, 289-293	1.2	10
29	In situ observation of the formation and stability of single fullerene molecules under electron irradiation. <i>Chemical Physics Letters</i> , <b>1996</b> , 254, 372-378	2.5	60
28	Formation and decay of spherical concentric-shell carbon clusters. <i>Journal of Crystal Growth</i> , <b>1996</b> , 163, 445-454	1.6	53
27	Centrifugal techniques for solution growth of semiconductor layers. <i>Journal of Crystal Growth</i> , <b>1996</b> , 166, 234-238	1.6	3
26	Solution growth of epitaxial semiconductor-on-insulator layers. <i>Journal of Crystal Growth</i> , <b>1996</b> , 166, 727-730	1.6	11
25	Carbon onions as nanoscopic pressure cells for diamond formation. <i>Nature</i> , <b>1996</b> , 382, 433-435	50.4	603
24	Stress relaxation in SiGe layers grown on oxide-patterned Si substrates. <i>Journal of Applied Physics</i> , <b>1996</b> , 80, 6223-6228	2.5	6
23	Laplacian growth of amorphous carbon filaments in a non-diffusion-limited experiment. <i>Physical Review E</i> , <b>1995</b> , 52, 5156-5160	2.4	35
22	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> , <b>1995</b> , 72, 149-157		28
21	Extremely Low Temperature Silicon Liquid Phase Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 386, 339		2
20	Semiconductor Epitaxial and Nonepitaxial Overgrowth from Solutions. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 399, 189		2
19	Fractal carbon filaments grown on insulators under irradiation in an electron microscope. <i>Philosophical Magazine Letters</i> , <b>1994</b> , 69, 45-51	1	22
18	The formation of curled concentric-shell clusters in boron nitride under electron irradiation. <i>Chemical Physics Letters</i> , <b>1994</b> , 231, 98-104	2.5	83
17	Strains in crystals with amorphous surface films studied by convergent beam electron diffraction and high-resolution imaging. <i>Ultramicroscopy</i> , <b>1994</b> , 56, 233-240	3.1	24
16	Low-temperature ohmic Au/Sb contacts to n-type Si. <i>Journal of Applied Physics</i> , <b>1994</b> , 75, 994-997	2.5	15
15	Convergent-beam electron diffraction studies of epitaxial Si/SiO2 systems. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1994</b> , 70, 341-357		11
14	Defect-Free Coalescence of Silicon Layers Over SiO2. <i>Materials Research Society Symposia Proceedings</i> , <b>1993</b> , 317, 263		1

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13	and Surfaces, <b>1993</b> , 57, 441-448		17	
12	The coalescence of silicon layers grown over SiO2 by liquid-phase epitaxy. <i>Applied Physics A: Solids and Surfaces</i> , <b>1993</b> , 57, 249-254		23	
11	Imaging of molecules, lattice and lattice defects in C60¶70 fullerites by high-resolution electron microscopy. <i>Philosophical Magazine Letters</i> , <b>1992</b> , 65, 283-289	1	13	
10	Dislocation generation in silicon grown laterally over SiO2 by liquid phase epitaxy. <i>Applied Physics A: Solids and Surfaces</i> , <b>1991</b> , 53, 317-323		19	
9	Thermal vacancies and positron-lifetime measurements in Fe76.3Al23.7. <i>Physical Review B</i> , <b>1990</b> , 41, 11869-11874	3.3	90	
8	Silicon layers grown over SiO2 by liquid phase epitaxy: Electron Microscopical study. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1990</b> , 48, 566-567			
7	Damage-free reactive ion etching of silicon in NF3 at low temperature. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>1989</b> , 4, 265-268	3.1	19	
6	Thermal Vacancies in the Noble Metals Cu, Ag, Au and in Pt Studied by Positron Lifetime Spectroscopy. <i>Materials Science Forum</i> , <b>1987</b> , 15-18, 117-124	0.4	45	
5	The Study of Positron Diffusion in Solids by Positron Spin Relaxation (e+SR) Experiments. <i>Physica Status Solidi A</i> , <b>1987</b> , 102, 91-106		11	
4	On the Systematics of Positron Lifetimes in Metals. <i>Physica Status Solidi A</i> , <b>1987</b> , 102, 171-179		92	
3	Thermal equilibrium vacancies in platinum studied by positron annihilation. <i>Physica Status Solidi A</i> , <b>1987</b> , 104, 263-272		9	
2	SiGe layer structures for solar cell application grown by liquid phase epitaxy		2	
1	Electron microscopy study of carbon onions synthesized by ion implantation		1	