

David B Geohegan

List of Publications by Year in descending order

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249
papers

17,728
citations

8732

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254
docs citations

254
times ranked

21181
citing authors

#	ARTICLE	IF	CITATIONS
1	Selective Antisite Defect Formation in WS ₂ Monolayers via Reactive Growth on Dilute W-Au Alloy Substrates. <i>Advanced Materials</i> , 2022, 34, e2106674.	11.1	14
2	Nonequilibrium synthesis and processing approaches to tailor heterogeneity in 2D materials. , 2022, , 221-258.		1
3	Janus Monolayers for Ultrafast and Directional Charge Transfer in Transition Metal Dichalcogenide Heterostructures. <i>ACS Nano</i> , 2022, 16, 4197-4205.	7.3	18
4	Laser synthesis and processing of atomically thin 2D materials. <i>Trends in Chemistry</i> , 2022, 4, 769-772.	4.4	1
5	Stabilized Synthesis of 2D Verbeekite: Monoclinic PdSe ₂ Crystals with High Mobility and In-Plane Optical and Electrical Anisotropy. <i>ACS Nano</i> , 2022, 16, 13900-13910.	7.3	14
6	Heterogeneities at multiple length scales in 2D layered materials: From localized defects and dopants to mesoscopic heterostructures. <i>Nano Research</i> , 2021, 14, 1625-1649.	5.8	8
7	Controllable Thin-Film Approaches for Doping and Alloying Transition Metal Dichalcogenides Monolayers. <i>Advanced Science</i> , 2021, 8, 2004249.	5.6	51
8	Intrinsic Defects in MoS ₂ Grown by Pulsed Laser Deposition: From Monolayers to Bilayers. <i>ACS Nano</i> , 2021, 15, 2858-2868.	7.3	40
9	Strain-Induced Growth of Twisted Bilayers during the Coalescence of Monolayer MoS ₂ Crystals. <i>ACS Nano</i> , 2021, 15, 4504-4517.	7.3	19
10	Understanding Substrate-Guided Assembly in van der Waals Epitaxy by <i>in Situ</i> Laser Crystallization within a Transmission Electron Microscope. <i>ACS Nano</i> , 2021, 15, 8638-8652.	7.3	7
11	Signature of Many-Body Localization of Phonons in Strongly Disordered Superlattices. <i>Nano Letters</i> , 2021, 21, 7419-7425.	4.5	1
12	Excitonic Dynamics in Janus MoSSe and WSSe Monolayers. <i>Nano Letters</i> , 2021, 21, 931-937.	4.5	86
13	Nonequilibrium Synthesis of Highly Active Nanostructured, Oxygen-Incorporated Amorphous Molybdenum Sulfide HER Electrocatalyst. <i>Small</i> , 2020, 16, e2004047.	5.2	29
14	Enhancement of van der Waals Interlayer Coupling through Polar Janus MoSSe. <i>Journal of the American Chemical Society</i> , 2020, 142, 17499-17507.	6.6	80
15	Giant enhancement of exciton diffusivity in two-dimensional semiconductors. <i>Science Advances</i> , 2020, 6, .	4.7	12
16	Two-Dimensional Palladium Diselenide with Strong In-Plane Optical Anisotropy and High Mobility Grown by Chemical Vapor Deposition. <i>Advanced Materials</i> , 2020, 32, e1906238.	11.1	81
17	Low Energy Implantation into Transition-Metal Dichalcogenide Monolayers to Form Janus Structures. <i>ACS Nano</i> , 2020, 14, 3896-3906.	7.3	136
18	In situ laser reflectivity to monitor and control the nucleation and growth of atomically thin 2D materials*. <i>2D Materials</i> , 2020, 7, 025048.	2.0	14

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19	Electron-Beam-Related Studies of Halide Perovskites: Challenges and Opportunities. <i>Advanced Energy Materials</i> , 2020, 10, 1903191.	10.2	53
20	Room-Temperature Electron-Hole Liquid in Monolayer MoS ₂ . <i>ACS Nano</i> , 2019, 13, 10351-10358.	7.3	49
21	Isotope-Engineering the Thermal Conductivity of Two-Dimensional MoS ₂ . <i>ACS Nano</i> , 2019, 13, 2481-2489.	7.3	42
22	Deep learning analysis of defect and phase evolution during electron beam-induced transformations in WS ₂ . <i>Npj Computational Materials</i> , 2019, 5, .	3.5	113
23	Strain tolerance of two-dimensional crystal growth on curved surfaces. <i>Science Advances</i> , 2019, 5, eaav4028.	4.7	46
24	Atomic Insight into Thermolysis-Driven Growth of 2D MoS ₂ . <i>Advanced Functional Materials</i> , 2019, 29, 1902149.	7.8	28
25	Defect-Mediated Phase Transformation in Anisotropic Two-Dimensional PdSe ₂ Crystals for Seamless Electrical Contacts. <i>Journal of the American Chemical Society</i> , 2019, 141, 8928-8936.	6.6	81
26	Spatial Mapping of Thermal Boundary Conductance at Metal-Molybdenum Diselenide Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 14418-14426.	4.0	16
27	Synthesis and emerging properties of 2D layered III-VI metal chalcogenides. <i>Applied Physics Reviews</i> , 2019, 6, 041312.	5.5	89
28	In Situ X-Ray Studies of Crystallization Kinetics and Ordering in Functional Organic and Hybrid Materials. , 2018, , 33-60.		0
29	Real-Time Observation of Order-Disorder Transformation of Organic Cations Induced Phase Transition and Anomalous Photoluminescence in Hybrid Perovskites. <i>Advanced Materials</i> , 2018, 30, e1705801.	11.1	60
30	Anomalous interlayer vibrations in strongly coupled layered PdSe ₂ . <i>2D Materials</i> , 2018, 5, 035016.	2.0	60
31	The growth and assembly of organic molecules and inorganic 2D materials on graphene for van der Waals heterostructures. <i>Carbon</i> , 2018, 131, 246-257.	5.4	21
32	A hybrid optimization algorithm to explore atomic configurations of TiO ₂ nanoparticles. <i>Computational Materials Science</i> , 2018, 141, 1-9.	1.4	4
33	Ultrafast Exciton Dissociation at the 2D-WS ₂ Monolayer/Perovskite Interface. <i>Journal of Physical Chemistry C</i> , 2018, 122, 28910-28917.	1.5	23
34	Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. <i>ACS Nano</i> , 2018, 12, 11756-11784.	7.3	388
35	Laser Synthesis, Processing, and Spectroscopy of Atomically-Thin Two Dimensional Materials. <i>Springer Series in Materials Science</i> , 2018, , 1-37.	0.4	1
36	In situ edge engineering in two-dimensional transition metal dichalcogenides. <i>Nature Communications</i> , 2018, 9, 2051.	5.8	100

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37	Mapping mesoscopic phase evolution during E-beam induced transformations via deep learning of atomically resolved images. <i>Npj Computational Materials</i> , 2018, 4, .	3.5	31
38	Ultrafast Spectral Dynamics of CsPb(Br _x Cl _{1-x}) ₃ Mixed-Halide Nanocrystals. <i>ACS Photonics</i> , 2018, 5, 3575-3583.	3.2	44
39	Cooperative Behavior in the Evolution of Alignment and Structure in Vertically Aligned Carbon-Nanotube Arrays Grown using Chemical Vapor Deposition. <i>Physical Review Applied</i> , 2018, 10, .	1.5	7
40	Photocurrent Transfer across Monolayer MoS ₂ /MoSe ₂ Lateral Heterojunctions. <i>ACS Nano</i> , 2018, 12, 7086-7092.	7.3	25
41	Ultrafast Excited-State Dynamics in Shape- and Composition-Controlled Gold-Silver Bimetallic Nanostructures. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4540-4547.	1.5	10
42	New approaches for synthesis and processing of 2D materials (Conference Presentation). , 2017, , .		0
43	Black Anatase Formation by Annealing of Amorphous Nanoparticles and the Role of the Ti ₂ O ₃ Shell in Self-Organized Crystallization by Particle Attachment. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22018-22025.	4.0	15
44	Pulsed laser vaporization synthesis of boron loaded few layered graphene (Conference Presentation). , 2017, , .		0
45	Optical signatures of defects in low temperature Raman and photoluminescence spectra of 2D crystals (Conference Presentation). , 2017, , .		0
46	Ultrafast charge and energy exchanges at hybrid interfaces involving 2D semiconductors (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 T		
47	Correlating the optical properties of WS ₂ monolayers grown by CVD with isoelectronic Mo doping level (Conference Presentation). , 2017, , .		0
48	Enhancing Ion Migration in Grain Boundaries of Hybrid Organic-Inorganic Perovskites by Chlorine. <i>Advanced Functional Materials</i> , 2017, 27, 1700749.	7.8	74
49	Edge-Controlled Growth and Etching of Two-Dimensional GaSe Monolayers. <i>Journal of the American Chemical Society</i> , 2017, 139, 482-491.	6.6	65
50	Nanostructured carbon electrocatalyst supports for intermediate-temperature fuel cells: Single-walled versus multi-walled structures. <i>Journal of Power Sources</i> , 2017, 337, 145-151.	4.0	12
51	Ultrafast carrier dynamics in bimetallic nanostructure-enhanced methylammonium lead bromide perovskites. <i>Nanoscale</i> , 2017, 9, 1475-1483.	2.8	37
52	PdSe ₂ : Pentagonal Two-Dimensional Layers with High Air Stability for Electronics. <i>Journal of the American Chemical Society</i> , 2017, 139, 14090-14097.	6.6	509
53	High Conduction Hopping Behavior Induced in Transition Metal Dichalcogenides by Percolating Defect Networks: Toward Atomically Thin Circuits. <i>Advanced Functional Materials</i> , 2017, 27, 1702829.	7.8	52
54	Bromine substitution improves excited-state dynamics in mesoporous mixed halide perovskite films. <i>Nanoscale</i> , 2017, 9, 12005-12013.	2.8	21

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55	Bottom up synthesis of boron-doped graphene for stable intermediate temperature fuel cell electrodes. Carbon, 2017, 123, 605-615.	5.4	23
56	Tilt Grain Boundary Topology Induced by Substrate Topography. ACS Nano, 2017, 11, 8612-8618.	7.3	27
57	Nonequilibrium Synthesis of TiO ₂ Nanoparticle "Building Blocks" for Crystal Growth by Sequential Attachment in Pulsed Laser Deposition. Nano Letters, 2017, 17, 4624-4633.	4.5	33
58	Suppression of Defects and Deep Levels Using Isoelectronic Tungsten Substitution in Monolayer MoSe ₂ . Advanced Functional Materials, 2017, 27, 1603850.	7.8	84
59	Low thermal budget, photonic-cured compact TiO ₂ layers for high-efficiency perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 9685-9690.	5.2	46
60	Persistent photoconductivity in two-dimensional Mo _{1-x} W _x Se ₂ "MoSe ₂ van der Waals heterojunctions. Journal of Materials Research, 2016, 31, 923-930.	1.2	20
61	In-Plane Optical Anisotropy of Layered Gallium Telluride. ACS Nano, 2016, 10, 8964-8972.	7.3	179
62	Ultrafast Dynamics of Metal Plasmons Induced by 2D Semiconductor Excitons in Hybrid Nanostructure Arrays. ACS Photonics, 2016, 3, 2389-2395.	3.2	42
63	Isoelectronic Tungsten Doping in Monolayer MoSe ₂ for Carrier Type Modulation. Advanced Materials, 2016, 28, 8240-8247.	11.1	85
64	Tailoring Vacancies Far Beyond Intrinsic Levels Changes the Carrier Type and Optical Response in Monolayer MoSe ₂ Crystals. Nano Letters, 2016, 16, 5213-5220.	4.5	121
65	Two-dimensional GaSe/MoSe ₂ misfit bilayer heterojunctions by van der Waals epitaxy. Science Advances, 2016, 2, e1501882.	4.7	239
66	Ultrafast Charge Transfer and Hybrid Exciton Formation in 2D/0D Heterostructures. Journal of the American Chemical Society, 2016, 138, 14713-14719.	6.6	102
67	Observation of Nanoscale Morphological and Structural Degradation in Perovskite Solar Cells by in Situ TEM. ACS Applied Materials & Interfaces, 2016, 8, 32333-32340.	4.0	54
68	Interlayer Coupling in Twisted WSe ₂ /WS ₂ Bilayer Heterostructures Revealed by Optical Spectroscopy. ACS Nano, 2016, 10, 6612-6622.	7.3	249
69	Nanoscale Silicon as a Catalyst for Graphene Growth: Mechanistic Insight from <i>in Situ</i> Raman Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 14180-14186.	1.5	10
70	Low temperature synthesis of hierarchical TiO ₂ nanostructures for high performance perovskite solar cells by pulsed laser deposition. Physical Chemistry Chemical Physics, 2016, 18, 27067-27072.	1.3	29
71	Low-Frequency Interlayer Raman Modes to Probe Interface of Twisted Bilayer MoS ₂ . Nano Letters, 2016, 16, 1435-1444.	4.5	177
72	Twisted MoSe ₂ Bilayers with Variable Local Stacking and Interlayer Coupling Revealed by Low-Frequency Raman Spectroscopy. ACS Nano, 2016, 10, 2736-2744.	7.3	117

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73	Carbon Nanotubes Grown on Metal Microelectrodes for the Detection of Dopamine. <i>Analytical Chemistry</i> , 2016, 88, 645-652.	3.2	113
74	Deciphering Halogen Competition in Organometallic Halide Perovskite Growth. <i>Journal of the American Chemical Society</i> , 2016, 138, 5028-5035.	6.6	92
75	Improving Light Harvesting in Dye-Sensitized Solar Cells Using Hybrid Bimetallic Nanostructures. <i>ACS Photonics</i> , 2016, 3, 385-394.	3.2	64
76	Thickness-dependent charge transport in few-layer MoS ₂ field-effect transistors. <i>Nanotechnology</i> , 2016, 27, 165203.	1.3	124
77	Anisotropic Electron-Photon and Electron-Phonon Interactions in Black Phosphorus. <i>Nano Letters</i> , 2016, 16, 2260-2267.	4.5	328
78	Ultrathin nanosheets of CrSiTe ₃ : a semiconducting two-dimensional ferromagnetic material. <i>Journal of Materials Chemistry C</i> , 2016, 4, 315-322.	2.7	235
79	Observation of two distinct negative trions in tungsten disulfide monolayers. <i>Physical Review B</i> , 2015, 92, .	1.1	44
80	Controllable Growth of Perovskite Films by Room-Temperature Air Exposure for Efficient Planar Heterojunction Photovoltaic Cells. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 14862-14865.	7.2	41
81	Revealing the Preferred Interlayer Orientations and Stackings of Two-Dimensional Bilayer Gallium Selenide Crystals. <i>Angewandte Chemie</i> , 2015, 127, 2750-2755.	1.6	5
82	High-Performance Flexible Perovskite Solar Cells by Using a Combination of Ultrasonic Spray-Coating and Low Thermal Budget Photonic Curing. <i>ACS Photonics</i> , 2015, 2, 680-686.	3.2	268
83	Revealing the Preferred Interlayer Orientations and Stackings of Two-Dimensional Bilayer Gallium Selenide Crystals. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2712-2717.	7.2	45
84	Van der Waals Epitaxial Growth of Two-Dimensional Single-Crystalline GaSe Domains on Graphene. <i>ACS Nano</i> , 2015, 9, 8078-8088.	7.3	103
85	Patterned arrays of lateral heterojunctions within monolayer two-dimensional semiconductors. <i>Nature Communications</i> , 2015, 6, 7749.	5.8	213
86	Perovskite Solar Cells with Near 100% Internal Quantum Efficiency Based on Large Single Crystalline Grains and Vertical Bulk Heterojunctions. <i>Journal of the American Chemical Society</i> , 2015, 137, 9210-9213.	6.6	246
87	Correlating high power conversion efficiency of PTB7:PC ₇₁ BM inverted organic solar cells with nanoscale structures. <i>Nanoscale</i> , 2015, 7, 15576-15583.	2.8	54
88	Low-Frequency Raman Fingerprints of Two-Dimensional Metal Dichalcogenide Layer Stacking Configurations. <i>ACS Nano</i> , 2015, 9, 6333-6342.	7.3	151
89	Low-Frequency Interlayer Breathing Modes in Few-Layer Black Phosphorus. <i>Nano Letters</i> , 2015, 15, 4080-4088.	4.5	182
90	Structure and Formation Mechanism of Black TiO ₂ Nanoparticles. <i>ACS Nano</i> , 2015, 9, 10482-10488.	7.3	170

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91	Nonlinear Fano-Resonant Dielectric Metasurfaces. Nano Letters, 2015, 15, 7388-7393.	4.5	474
92	Equally Efficient Interlayer Exciton Relaxation and Improved Absorption in Epitaxial and Nonepitaxial MoS ₂ /WS ₂ Heterostructures. Nano Letters, 2015, 15, 486-491.	4.5	337
93	Slowing of femtosecond laser-generated nanoparticles in a background gas. Applied Physics Letters, 2014, 105, 213108.	1.5	6
94	Cooperative Island Growth of Large-Area Single-Crystal Graphene on Copper Using Chemical Vapor Deposition. ACS Nano, 2014, 8, 5657-5669.	7.3	91
95	The isotopic effects of deuteration on optoelectronic properties of conducting polymers. Nature Communications, 2014, 5, 3180.	5.8	103
96	Pulsed Laser Deposition of Photoresponsive Two-Dimensional GaSe Nanosheet Networks. Advanced Functional Materials, 2014, 24, 6365-6371.	7.8	108
97	Digital Transfer Growth of Patterned 2D Metal Chalcogenides by Confined Nanoparticle Evaporation. ACS Nano, 2014, 8, 11567-11575.	7.3	47
98	Nanoparticle generation and transport resulting from femtosecond laser ablation of ultrathin metal films: Time-resolved measurements and molecular dynamics simulations. Applied Physics Letters, 2014, 104, .	1.5	42
99	Highly sensitive phototransistors based on two-dimensional GaTe nanosheets with direct bandgap. Nano Research, 2014, 7, 694-703.	5.8	140
100	Revealing the surface and bulk regimes of isothermal graphene nucleation and growth on Ni with in situ kinetic measurements and modeling. Carbon, 2014, 79, 256-264.	5.4	16
101	Understanding How Processing Additives Tune the Nanoscale Morphology of High Efficiency Organic Photovoltaic Blends: From Casting Solution to Spin-Cast Thin Film. Advanced Functional Materials, 2014, 24, 6647-6657.	7.8	39
102	Controlled Vapor Phase Growth of Single Crystalline, Two-Dimensional GaSe Crystals with High Photoresponse. Scientific Reports, 2014, 4, 5497.	1.6	222
103	Laser Interactions for the Synthesis and In Situ Diagnostics of Nanomaterials. Springer Series in Materials Science, 2014, , 143-173.	0.4	4
104	Real-time optical diagnostics of graphene growth induced by pulsed chemical vapor deposition. Nanoscale, 2013, 5, 6507.	2.8	22
105	High-performance organic field-effect transistors with dielectric and active layers printed sequentially by ultrasonic spraying. Journal of Materials Chemistry C, 2013, 1, 4384.	2.7	27
106	Nature of the band gap and origin of the electro-/photo-activity of Co ₃ O ₄ . Journal of Materials Chemistry C, 2013, 1, 4628.	2.7	176
107	Fluorination of brick and mortar-soft-templated graphitic ordered mesoporous carbons for high power lithium-ion battery. Journal of Materials Chemistry A, 2013, 1, 9414.	5.2	23
108	Excimer laser reduction and patterning of graphite oxide. Carbon, 2013, 53, 81-89.	5.4	107

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109	Effect of purity on the electro-optical properties of single wall nanotube-based transparent conductive electrodes. Carbon, 2013, 64, 1-5.	5.4	9
110	Surface-Induced Orientation Control of CuPc Molecules for the Epitaxial Growth of Highly Ordered Organic Crystals on Graphene. Journal of the American Chemical Society, 2013, 135, 3680-3687.	6.6	125
111	A water-soluble polythiophene for organic field-effect transistors. Polymer Chemistry, 2013, 4, 5270.	1.9	78
112	Highly Responsive Ultrathin GaS Nanosheet Photodetectors on Rigid and Flexible Substrates. Nano Letters, 2013, 13, 1649-1654.	4.5	683
113	How the shape of catalyst nanoparticles determines their crystallographic orientation during carbon nanofiber growth. Carbon, 2013, 60, 41-45.	5.4	7
114	High-temperature transformation of Fe-decorated single-wall carbon nanohorns to nanoysters: a combined experimental and theoretical study. Nanoscale, 2013, 5, 1849-1857.	2.8	10
115	Uniform, Homogenous Coatings of Carbon Nanohorns on Arbitrary Substrates from Common Solvents. ACS Applied Materials & Interfaces, 2013, 5, 13153-13160.	4.0	23
116	Spatial and temporal measurements of temperature and cell viability in response to nanoparticle-mediated photothermal therapy. Nanomedicine, 2012, 7, 1729-1742.	1.7	14
117	Understanding the Metal-Directed Growth of Single-Crystal M-TCNQF ₄ Organic Nanowires with Time-Resolved, in Situ X-ray Diffraction and First-Principles Theoretical Studies. Journal of the American Chemical Society, 2012, 134, 14353-14361.	6.6	17
118	Metal-assisted hydrogen storage on Pt-decorated single-walled carbon nanohorns. Carbon, 2012, 50, 4953-4964.	5.4	69
119	Nonequilibrium laser synthesis and real-time diagnostics of carbon nanomaterial growth. , 2012, , .		0
120	Incremental Growth of Short SWNT Arrays by Pulsed Chemical Vapor Deposition. Small, 2012, 8, 1534-1542.	5.2	9
121	Characterization and Carbonization of Highly Oriented Poly(diiododiacetylene) Nanofibers. Macromolecules, 2011, 44, 2626-2631.	2.2	30
122	Assembly of Single-Walled Carbon Nanohorn Supported Liposome Particles. Bioconjugate Chemistry, 2011, 22, 1012-1016.	1.8	28
123	Flux-Dependent Growth Kinetics and Diameter Selectivity in Single-Wall Carbon Nanotube Arrays. ACS Nano, 2011, 5, 8311-8321.	7.3	33
124	Vibrational spectrum of the endohedral $Y_{2}C_{15}$	1.1	15
125	High-Performance Field-Effect Transistors Based on Polystyrene- <i>b</i> -Poly(3-hexylthiophene) Diblock Copolymers. ACS Nano, 2011, 5, 3559-3567.	7.3	122
126	Antioxidant Deactivation on Graphenic Nanocarbon Surfaces. Small, 2011, 7, 2775-2785.	5.2	133

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127	Single walled carbon nanohorns as photothermal cancer agents. <i>Lasers in Surgery and Medicine</i> , 2011, 43, 43-51.	1.1	67
128	PS- <i>b</i> -P3HT Copolymers as P3HT/PCBM Interfacial Compatibilizers for High Efficiency Photovoltaics. <i>Advanced Materials</i> , 2011, 23, 5529-5535.	11.1	110
129	Raman study of Fano interference in <i>p</i> -type doped silicon. <i>Journal of Raman Spectroscopy</i> , 2010, 41, 1759-1764.	1.2	49
130	Laser Interactions in Nanomaterials Synthesis. <i>Springer Series in Materials Science</i> , 2010, , 1-17.	0.4	3
131	Narrow and intense resonances in the low-frequency region of surface-enhanced Raman spectra of single-wall carbon nanotubes. <i>Physical Review B</i> , 2010, 82, .	1.1	8
132	Separation of junction and bundle resistance in single wall carbon nanotube percolation networks by impedance spectroscopy. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	56
133	Investigation of Gd ₃ N@C ₂ (40%) family by Raman and inelastic electron tunneling spectroscopy. <i>Physical Review B</i> , 2010, 81, .	1.1	25
134	Pulsed Growth of Vertically Aligned Nanotube Arrays with Variable Density. <i>ACS Nano</i> , 2010, 4, 7573-7581.	7.3	41
135	In Vitro and in Vivo Studies of Single-Walled Carbon Nanohorns with Encapsulated Metallofullerenes and Exohedrally Functionalized Quantum Dots. <i>Nano Letters</i> , 2010, 10, 2843-2848.	4.5	56
136	A Facile High-speed Vibration Milling Method to Water-disperse Single-walled Carbon Nanohorns. <i>Chemistry of Materials</i> , 2010, 22, 347-351.	3.2	22
137	The importance of chain connectivity in the formation of non-covalent interactions between polymers and single-walled carbon nanotubes and its impact on dispersion. <i>Soft Matter</i> , 2010, 6, 2801.	1.2	34
138	Metastable Copper-Phthalocyanine Single-Crystal Nanowires and Their Use in Fabricating High-Performance Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2009, 19, 3776-3780.	7.8	81
139	Model for Self-Assembly of Carbon Nanotubes from Acetylene Based on Real-Time Studies of Vertically Aligned Growth Kinetics. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15484-15491.	1.5	59
140	Growth, Patterning, and One-Dimensional Electron -Transport Properties of Self-Assembled Ag-TCNQF4 Organic Nanowires. <i>Chemistry of Materials</i> , 2009, 21, 4275-4281.	3.2	48
141	Cumulative and continuous laser vaporization synthesis of single wall carbon nanotubes and nanohorns. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 93, 849-855.	1.1	34
142	Altering the catalytic activity of thin metal catalyst films for controlled growth of chemical vapor deposited vertically aligned carbon nanotube arrays. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 93, 1005-1009.	1.1	8
143	Pulsed laser CVD investigations of single-wall carbon nanotube growth dynamics. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 93, 987-993.	1.1	25
144	Selective Patterned Growth of Single-Crystal Ag-TCNQ Nanowires for Devices by Vapor-Solid Chemical Reaction. <i>Advanced Functional Materials</i> , 2008, 18, 3043-3048.	7.8	57

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145	Calcium as the Superior Coating Metal in Functionalization of Carbon Fullerenes for High-Capacity Hydrogen Storage. <i>Physical Review Letters</i> , 2008, 100, 206806.	2.9	391
146	Fabrication of Ag-tetracyanoquinodimethane nanostructures using ink-jet printing/vapor-solid chemical reaction process. <i>Journal of Vacuum Science & Technology B</i> , 2008, 26, L48-L52.	1.3	2
147	THERMAL CHARACTERIZATION OF MULTI-WALL CARBON NANOTUBE BUNDLES BASED ON PULSED LASER-ASSISTED THERMAL RELAXATION. <i>Functional Materials Letters</i> , 2008, 01, 71-76.	0.7	20
148	Development of pulsed laser-assisted thermal relaxation technique for thermal characterization of microscale wires. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	40
149	Real-time imaging of vertically aligned carbon nanotube array growth kinetics. <i>Nanotechnology</i> , 2008, 19, 055605.	1.3	61
150	Formation studies and controlled production of carbon nanohorns using continuous in situ characterization techniques. <i>Nanotechnology</i> , 2007, 18, 185604.	1.3	19
151	Formation of single crystalline ZnO nanotubes without catalysts and templates. <i>Applied Physics Letters</i> , 2007, 90, 113108.	1.5	89
152	Simple model of the interrelation between single- and multiwall carbon nanotube growth rates for the CVD process. <i>Physical Review B</i> , 2007, 75, .	1.1	53
153	One-dimensional electron transport in Cu-tetracyanoquinodimethane organic nanowires. <i>Applied Physics Letters</i> , 2007, 90, 193115.	1.5	22
154	Single-Crystal Organic Nanowires of Copper- α -Tetracyanoquinodimethane: Synthesis, Patterning, Characterization, and Device Applications. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 2650-2654.	7.2	90
155	The effect of annealing on the electrical and thermal transport properties of macroscopic bundles of long multi-wall carbon nanotubes. <i>Physica B: Condensed Matter</i> , 2007, 388, 326-330.	1.3	57
156	In situ time-resolved measurements of carbon nanotube and nanohorn growth. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 3944-3949.	0.7	18
157	Imperfect surface order and functionalization in vertical carbon nanotube arrays probed by near edge X-ray absorption fine structure spectroscopy (NEXAFS). <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 5038.	1.3	20
158	Fast and highly anisotropic thermal transport through vertically aligned carbon nanotube arrays. <i>Applied Physics Letters</i> , 2006, 89, 223110.	1.5	157
159	Near-Edge X-ray Absorption Fine Structure Spectroscopy as a Tool for Investigating Nanomaterials. <i>Small</i> , 2006, 2, 26-35.	5.2	152
160	Improving Dispersion of Single-Walled Carbon Nanotubes in a Polymer Matrix Using Specific Interactions. <i>Chemistry of Materials</i> , 2006, 18, 3513-3522.	3.2	46
161	Directed Integration of Tetracyanoquinodimethane-Cu Organic Nanowires into Prefabricated Device Architectures. <i>Advanced Materials</i> , 2006, 18, 2184-2188.	11.1	91
162	In situ electric-field-induced contrast imaging of electronic transport pathways in nanotube-polymer composites. <i>Applied Physics Letters</i> , 2006, 89, 013114.	1.5	12

#	ARTICLE	IF	CITATIONS
163	LASER-BASED SYNTHESIS, DIAGNOSTICS, AND CONTROL OF SINGLE-WALLED CARBON NANOTUBES AND NANOHORNS FOR COMPOSITES AND BIOLOGICAL NANOVECTORS. , 2006, , 205-223.		3
164	In situ measurements and modeling of carbon nanotube array growth kinetics during chemical vapor deposition. Applied Physics A: Materials Science and Processing, 2005, 81, 223-240.	1.1	300
165	Electronic transport imaging in a multiwire SnO ₂ chemical field-effect transistor device. Journal of Applied Physics, 2005, 98, 044503.	1.1	62
166	Structural control of vertically aligned multiwalled carbon nanotubes by radio-frequency plasmas. Applied Physics Letters, 2005, 87, 173106.	1.5	20
167	High-density vertically aligned multiwalled carbon nanotubes with tubular structures. Applied Physics Letters, 2005, 86, 253105.	1.5	38
168	Reorientation of carbon nanotubes in polymer matrix composites using compressive loading. Journal of Materials Research, 2005, 20, 1026-1032.	1.2	10
169	Carbon nanotube effects on electroluminescence and photovoltaic response in conjugated polymers. Applied Physics Letters, 2005, 87, 263118.	1.5	57
170	Low Temperature Growth of Boron Nitride Nanotubes on Substrates. Nano Letters, 2005, 5, 2528-2532.	4.5	176
171	A laser-deposition approach to compositional-spread discovery of materials on conventional sample sizes. Measurement Science and Technology, 2005, 16, 21-31.	1.4	20
172	Molecular Beam-Controlled Nucleation and Growth of Vertically Aligned Single-Wall Carbon Nanotube Arrays. Journal of Physical Chemistry B, 2005, 109, 16684-16694.	1.2	137
173	Scanning probe microscopy imaging of frequency dependent electrical transport through carbon nanotube networks in polymers. Nanotechnology, 2004, 15, 907-912.	1.3	23
174	Rapid Growth of Long, Vertically Aligned Carbon Nanotubes through Efficient Catalyst Optimization Using Metal Film Gradients. Nano Letters, 2004, 4, 1939-1942.	4.5	88
175	In situ control of the catalyst efficiency in chemical vapor deposition of vertically aligned carbon nanotubes on predeposited metal catalyst films. Applied Physics Letters, 2004, 84, 1759-1761.	1.5	110
176	Growth behavior of carbon nanotubes on multilayered metal catalyst film in chemical vapor deposition. Chemical Physics Letters, 2003, 374, 222-228.	1.2	133
177	Nucleation of Single-Walled Carbon Nanotubes. Physical Review Letters, 2003, 90, 145501.	2.9	127
178	Comment on "Single Crystals of Single-Walled Carbon Nanotubes Formed by Self-Assembly". Science, 2003, 300, 1236b-1236.	6.0	8
179	In situ growth rate measurements and length control during chemical vapor deposition of vertically aligned multiwall carbon nanotubes. Applied Physics Letters, 2003, 83, 1851-1853.	1.5	127
180	Integrally gated carbon nanotube field emission cathodes produced by standard microfabrication techniques. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 957.	1.6	19

#	ARTICLE	IF	CITATIONS
181	Synthesis of multifunctional single-wall carbon nanotube-amorphous diamond thin film composites. , 2003, , .		1
182	In situ optical absorption spectroscopy, incandescence, and light-scattering characterization of single-wall carbon nanotube synthesis by the laser vaporization technique. , 2003, 4977, 648.		0
183	Synthesis and characterization of single-wall carbon nanotube-amorphous diamond thin-film composites. Applied Physics Letters, 2002, 81, 2097-2099.	1.5	44
184	Investigations of single-wall carbon nanotube growth by time-restricted laser vaporization. Physical Review B, 2002, 65, .	1.1	87
185	<title>Laser synthesis of single-wall carbon nanotubes with time-resolved in-situ diagnostics</title>. , 2002, , .		0
186	<title>Laser synthesis of single-wall carbon nanotubes with time-resolved in situ diagnostics</title>. , 2002, 4762, 268.		0
187	Operation of individual integrally gated carbon nanotube field emitter cells. Applied Physics Letters, 2002, 81, 2860-2862.	1.5	24
188	Time-resolved diagnostics of single wall carbon nanotube synthesis by laser vaporization. Applied Surface Science, 2002, 197-198, 552-562.	3.1	26
189	The electrodeposition of metal at metal/carbon nanotube junctions. Chemical Physics Letters, 2002, 361, 525-529.	1.2	18
190	Condensed phase growth of single-wall carbon nanotubes from laser annealed nanoparticulates. Applied Physics Letters, 2001, 78, 3307-3309.	1.5	52
191	Time-resolved diagnostics and mechanisms of single-wall carbon nanotube synthesis by the laser vaporization technique. , 2001, , .		0
192	Laser-synthesis of single-wall carbon nanotubes with time-resolved in situ diagnostics. , 2001, , .		0
193	<title>Computer modeling of the interaction of a laser-ablated plume with an ambient background gas</title>. , 2000, , .		0
194	<title>Dynamics of the vapor plumes produced by the MALDI technique</title>. , 2000, 4070, 166.		3
195	<title>Aspects of nanoparticle formation during pulsed laser ablation</title>. , 2000, , .		0
196	Characterization of thin-film amorphous semiconductors using spectroscopic ellipsometry. Thin Solid Films, 2000, 377-378, 68-73.	0.8	134
197	Dynamics of single-wall carbon nanotube synthesis by laser vaporization. Applied Physics A: Materials Science and Processing, 2000, 70, 153-160.	1.1	148
198	<title>In-situ plasma diagnostic investigations of single-wall carbon nanotube synthesis by laser ablation of C-Ni-Co targets</title>. , 2000, , .		1

#	ARTICLE	IF	CITATIONS
199	In situ imaging and spectroscopy of single-wall carbon nanotube synthesis by laser vaporization. Applied Physics Letters, 2000, 76, 182-184.	1.5	115
200	Theory and numerical modeling of the accelerated expansion of laser-ablated materials near a solid surface. Physical Review B, 1999, 60, 8373-8382.	1.1	37
201	Gas-phase nanoparticle formation and transport during pulsed laser deposition of Y1Ba2Cu3O7 ^d . Applied Physics Letters, 1999, 74, 3788-3790.	1.5	60
202	Imaging of Vapor Plumes Produced by Matrix Assisted Laser Desorption: A Plume Sharpening Effect. Physical Review Letters, 1999, 83, 444-447.	2.9	103
203	<title>Pulsed-laser-deposited amorphous diamond and related materials: synthesis, characterization, and field emission properties</title>. , 1999, , ,		1
204	<title>Crystallinities and light-emitting properties of nanostructured SiGe alloy prepared by pulsed laser ablation in inert background gases</title>. , 1999, 3618, 512.		1
205	Gas-phase diagnostics and LIF-imaging of 3-hydroxypicolinic acid maldi-matrix plumes. Chemical Physics Letters, 1998, 286, 425-432.	1.2	74
206	Dynamics of plume propagation, splitting, and nanoparticle formation during pulsed-laser ablation. Applied Surface Science, 1998, 127-129, 151-158.	3.1	91
207	LIF imaging and gas-phase diagnostics of laser desorbed MALDI-matrix plumes. Applied Surface Science, 1998, 127-129, 248-254.	3.1	24
208	Time-resolved imaging of gas phase nanoparticle synthesis by laser ablation. Applied Physics Letters, 1998, 72, 2987-2989.	1.5	318
209	Photoluminescence from gas-suspended SiOx nanoparticles synthesized by laser ablation. Applied Physics Letters, 1998, 73, 438-440.	1.5	108
210	Dynamics of plume propagation and splitting during pulsed-laser ablation of Si in He and Ar. Physical Review B, 1998, 58, 1533-1543.	1.1	87
211	Structure and optical properties of amorphous diamond films prepared by ArF laser ablation as a function of carbon ion kinetic energy. Applied Physics Letters, 1998, 73, 2591-2593.	1.5	70
212	Dynamics of Plume Propagation and Splitting during Pulsed-Laser Ablation. Physical Review Letters, 1997, 79, 1571-1574.	2.9	174
213	Synthesis of Novel Thin-Film Materials by Pulsed Laser Deposition. Science, 1996, 273, 898-903.	6.0	547
214	Modeling of dynamical processes in laser ablation. Applied Surface Science, 1996, 96-98, 14-23.	3.1	47
215	Laser ablation plume thermalization dynamics in background gases: combined imaging, optical absorption and emission spectroscopy, and ion probe measurements. Applied Surface Science, 1996, 96-98, 131-138.	3.1	75
216	Laser-solid interaction and dynamics of laser-ablated materials. Applied Surface Science, 1996, 96-98, 45-49.	3.1	35

#	ARTICLE	IF	CITATIONS
217	Comparative diagnostics of ArF- and KrF-laser generated carbon plumes used for amorphous diamond-like carbon film deposition. Applied Surface Science, 1996, 96-98, 859-865.	3.1	50
218	Mechanisms affecting kinetic energies of laser-ablated materials. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 1111-1114.	0.9	31
219	Modeling of plume dynamics in laser ablation processes for thin film deposition of materials. Physics of Plasmas, 1996, 3, 2203-2209.	0.7	39
220	Laser ablation plume thermalization dynamics in background gases: combined imaging, optical absorption and emission spectroscopy, and ion probe measurements. , 1996, , 131-138.		0
221	Collisional Effects of Background Gases on Pulsed Laser Deposition Plasma Beams. Materials Research Society Symposia Proceedings, 1995, 388, 21.	0.1	2
222	Species-resolved imaging and gated photon counting Spectroscopy of laser ablation plume dynamics During krf- and arf-laser pld of amorphous diamond films. Materials Research Society Symposia Proceedings, 1995, 397, 55.	0.1	25
223	Growth of highly doped p-type ZnTe films by pulsed laser ablation in molecular nitrogen. Applied Physics Letters, 1995, 67, 2545-2547.	1.5	38
224	Dynamics of laser ablation plume penetration through low pressure background gases. Applied Physics Letters, 1995, 67, 197-199.	1.5	189
225	Accelerated Expansion of Laser-Ablated Materials near a Solid Surface. Physical Review Letters, 1995, 75, 4706-4709.	2.9	60
226	Gated ICCD Photography of the KrF-Laser Ablation of Graphite into Background Gases. , 1994, , 349-354.		4
227	Imaging and blackbody emission spectra of particulates generated in the KrF-laser ablation of BN and YBa ₂ Cu ₃ O _{7-x} . Applied Physics Letters, 1993, 62, 1463-1465.	1.5	86
228	Fast-iccd Photography and Gated Photon Counting Measurements of Blackbody Emission from Particulates Generated in The KrF-Laser Ablation of BN and YBCO. Materials Research Society Symposia Proceedings, 1992, 285, 27.	0.1	15
229	Fast intensified-iccd photography of YBa ₂ Cu ₃ O _{7-x} laser ablation in vacuum and ambient oxygen. Applied Physics Letters, 1992, 60, 2732-2734.	1.5	383
230	Physics and diagnostics of laser ablation plume propagation for high-Tc superconductor film growth. Thin Solid Films, 1992, 220, 138-145.	0.8	165
231	Spectroscopic and Ion Probe Characterization of the Transport Process Following Laser Ablation of Yb ₂ Cu ₃ O _x . Materials Research Society Symposia Proceedings, 1990, 191, 211.	0.1	6
232	Heteroepitaxial growth of Ge films on (100)-GaAs by pyrolysis of digermane. Applied Physics Letters, 1989, 55, 858-860.	1.5	10
233	Characterization of ground-state neutral and ion transport during laser ablation of YBa ₂ Cu ₃ O _{7-x} using transient optical absorption spectroscopy. Applied Physics Letters, 1989, 55, 2345-2347.	1.5	137
234	Low temperature photon-controlled growth of thin films and multilayered structures. Applied Surface Science, 1989, 36, 59-69.	3.1	12

#	ARTICLE	IF	CITATIONS
235	ArF laser photochemical deposition of amorphous silicon from disilane: Spectroscopic studies and comparison with thermal CVD. Applied Surface Science, 1989, 36, 70-80.	3.1	15
236	Photon-controlled fabrication of amorphous superlattice structures using ArF (193 nm) excimer laser photolysis. Applied Physics Letters, 1988, 52, 1868-1870.	1.5	20
237	Absorption spectrum of Kr ₂ F(4s ²) in the near ultraviolet and visible (335-600 nm): Comparison with Kr+2(1/2 u) measurements. Journal of Chemical Physics, 1988, 89, 3410-3427.	1.2	21
238	Epitaxial growth of Ge films on GaAs (285-415°C) by laser photochemical vapor deposition. Applied Physics Letters, 1988, 52, 1710-1712.	1.5	17
239	Pulsed laser deposition of thin superconducting films of Ho ₁ Ba ₂ Cu ₃ O ₇ and Y ₁ Ba ₂ Cu ₃ O ₇ . Journal of Materials Research, 1988, 3, 1169-1179.	1.2	24
240	Absolute photoionization cross sections for Kr(5s) and Kr2 5s+u (1u,0) excited states at 248 nm. Journal of Chemical Physics, 1987, 86, 577-587.	1.2	7
241	Xe2Cl and Kr2F excited state (4 2) absorption spectra: measurements of absolute cross sections. Chemical Physics Letters, 1987, 139, 519-524.	1.2	13
242	XeCl laser power enhancement with an external ultraviolet laser. IEEE Journal of Quantum Electronics, 1986, 22, 501-504.	1.0	2
243	Resonantly enhanced three-photon ionization of krypton. Physical Review A, 1986, 33, 269-275.	1.0	17
244	Absorption of electronically excited Xe2Cl in the ultraviolet. Journal of Chemical Physics, 1985, 82, 4862-4866.	1.2	14
245	Photoionization of vapor phase thallium and indium monohalides in the ultraviolet: Absolute cross sections and photofragment spectroscopy by photodetachment of I ⁺ . Journal of Chemical Physics, 1984, 81, 5336-5351.	1.2	10
246	Column IIIA metal film deposition by dissociative photoionization of metal halide vapors. Applied Physics Letters, 1984, 45, 1146-1148.	1.5	19
247	Radiative collision-induced electron continuum-continuum scattering. Physical Review A, 1983, 28, 1395-1400.	1.0	0
248	Double-exposure speckle photography for the measurement of small displacements. American Journal of Physics, 1983, 51, 315-320.	0.3	0
249	Modeling and simulation of short-channel MOSFETs operating in deep weak inversion. , 0, , .		0