Yifeng Fu

List of Publications by Year in descending order

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80 papers	1,766 citations	361296 20 h-index	289141 40 g-index
80 all docs	80 docs citations	80 times ranked	2554 citing authors

#	Article	IF	Citations
1	Graphene related materials for thermal management. 2D Materials, 2020, 7, 012001.	2.0	161
2	Synthesis of graphene quantum dots and their applications in drug delivery. Journal of Nanobiotechnology, 2020, 18, 142.	4.2	142
3	Synthesis Methods of Two-Dimensional MoS2: A Brief Review. Crystals, 2017, 7, 198.	1.0	138
4	Functionalization mediates heat transport in graphene nanoflakes. Nature Communications, 2016, 7, 11281.	5.8	123
5	Improved Heat Spreading Performance of Functionalized Graphene in Microelectronic Device Application. Advanced Functional Materials, 2015, 25, 4430-4435.	7.8	117
6	Thermal chemical vapor deposition grown graphene heat spreader for thermal management of hot spots. Carbon, 2013, 61, 342-348.	5.4	96
7	Through-Silicon Vias Filled With Densified and Transferred Carbon Nanotube Forests. IEEE Electron Device Letters, 2012, 33, 420-422.	2.2	67
8	Synthesis and applications of two-dimensional hexagonal boron nitride in electronics manufacturing. Electronic Materials Letters, 2016, 12, 1-16.	1.0	67
9	A complete carbon-nanotube-based on-chip cooling solution with very high heat dissipation capacity. Nanotechnology, 2012, 23, 045304.	1.3	64
10	Ultrafast Transfer of Metalâ€Enhanced Carbon Nanotubes at Low Temperature for Largeâ€Scale Electronics Assembly. Advanced Materials, 2010, 22, 5039-5042.	11.1	48
11	Vertically Stacked Carbon Nanotube-Based Interconnects for Through Silicon Via Application. IEEE Electron Device Letters, 2015, 36, 499-501.	2.2	44
12	Graphene oxide based coatings on nitinol for biomedical implant applications: effectively promote mammalian cell growth but kill bacteria. RSC Advances, 2016, 6, 38124-38134.	1.7	44
13	Vertically aligned CNT-Cu nano-composite material for stacked through-silicon-via interconnects. Nanotechnology, 2016, 27, 335705.	1.3	43
14	Templated Growth of Covalently Bonded Threeâ€Dimensional Carbon Nanotube Networks Originated from Graphene. Advanced Materials, 2012, 24, 1576-1581.	11.1	37
15	Two-dimensional hexagonal boron nitride as lateral heat spreader in electrically insulating packaging. Journal Physics D: Applied Physics, 2016, 49, 265501.	1.3	33
16	A portable micro glucose sensor based on copper-based nanocomposite structure. New Journal of Chemistry, 2019, 43, 7806-7813.	1.4	32
17	Compact and low loss electrochemical capacitors using a graphite / carbon nanotube hybrid material for miniaturized systems. Journal of Power Sources, 2019, 412, 374-383.	4.0	32
18	Characterization and simulation of liquid phase exfoliated graphene-based films for heat spreading applications. Carbon, 2016, 106, 195-201.	5.4	28

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19	Carbon nanotubes for electronics manufacturing and packaging: from growth to integration. Advances in Manufacturing, 2013, 1, 13-27.	3.2	22
20	Tape-Assisted Transfer of Carbon Nanotube Bundles for Through-Silicon-Via Applications. Journal of Electronic Materials, 2015, 44, 2898-2907.	1.0	21
21	Egg albumen templated graphene foams for high-performance supercapacitor electrodes and electrochemical sensors. Journal of Materials Chemistry A, 2018, 6, 18267-18275.	5.2	21
22	Scalable three-dimensional Ni3P-based composite networks for flexible asymmertric supercapacitors. Chemical Engineering Journal, 2020, 380, 122621.	6.6	21
23	Flexible Multifunctionalized Carbon Nanotubesâ€Based Hybrid Nanowires. Advanced Functional Materials, 2015, 25, 4135-4143.	7.8	20
24	Improving Thermal Transport at Carbon Hybrid Interfaces by Covalent Bonds. Advanced Materials Interfaces, 2018, 5, 1800318.	1.9	20
25	Selective growth of double-walled carbon nanotubes on gold films. Materials Letters, 2012, 72, 78-80.	1.3	19
26	High porosity and light weight graphene foam heat sink and phase change material container for thermal management. Nanotechnology, 2020, 31, 424003.	1.3	17
27	Nanostructured polymer-metal composite for thermal interface material applications. , 2008, , .		15
28	Embedded Finâ€Like Metal/CNT Hybrid Structures for Flexible and Transparent Conductors. Small, 2016, 12, 1521-1526.	5.2	15
29	Mechanical and thermal characterization of a novel nanocomposite thermal interface material for electronic packaging. Microelectronics Reliability, 2016, 56, 129-135.	0.9	15
30	Effects of high temperature treatment of carbon nanotube arrays on graphite: increased crystallinity, anchoring and inter-tube bonding. Nanotechnology, 2020, 31, 455708.	1.3	15
31	Degradation of Carbon Nanotube Array Thermal Interface Materials through Thermal Aging: Effects of Bonding, Array Height, and Catalyst Oxidation. ACS Applied Materials & Interfaces, 2021, 13, 30992-31000.	4.0	15
32	Understanding noninvasive charge transfer doping of graphene: a comparative study. Journal of Materials Science: Materials in Electronics, 2018, 29, 5239-5252.	1.1	14
33	Controllable and fast synthesis of bilayer graphene by chemical vapor deposition on copper foil using a cold wall reactor. Chemical Engineering Journal, 2016, 304, 106-114.	6.6	13
34	Chemical vapor deposition grown graphene on Cu-Pt alloys. Materials Letters, 2017, 193, 255-258.	1.3	13
35	A lightweight and high thermal performance graphene heat pipe. Nano Select, 2021, 2, 364-372.	1.9	12
36	Reliability Investigation of a Carbon Nanotube Array Thermal Interface Material. Energies, 2019, 12, 2080.	1.6	11

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37	Application of through silicon via technology forin situtemperature monitoring on thermal interfaces. Journal of Micromechanics and Microengineering, 2010, 20, 025027.	1.5	10
38	Thick film patterning by lift-off process using double-coated single photoresists. Materials Letters, 2012, 76, 117-119.	1.3	9
39	Characterization for graphene as heat spreader using thermal imaging method. , 2013, , .		9
40	Graphene based heat spreader for high power chip cooling using flip-chip technology. , 2013, , .		9
41	Thermal characterization of power devices using graphene-based film. , 2014, , .		8
42	Graphene heat spreader for thermal management of hot spots. , 2013, , .		7
43	Combination of positive charges and honeycomb pores to promote MC3T3-E1 cell behaviour. RSC Advances, 2015, 5, 42276-42286.	1.7	7
44	Cooling hot spots by hexagonal boron nitride heat spreaders. , 2015, , .		7
45	Thermal Characterization of Low-Dimensional Materials by Resistance Thermometers. Materials, 2019, 12, 1740.	1.3	7
46	Infrared emissivity measurement for vertically aligned multiwall carbon nanotubes (CNTs) based heat spreader applied in high power electronics packaging. , 2016, , .		6
47	A flexible and stackable 3D interconnect system using growth-engineered carbon nanotube scaffolds. Flexible and Printed Electronics, 2017, 2, 025003.	1.5	6
48	Covalent Anchoring of Carbon Nanotube-Based Thermal Interface Materials Using Epoxy-Silane Monolayers. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 427-433.	1.4	6
49	Enhanced cold wall CVD reactor growth of horizontally aligned single-walled carbon nanotubes. Electronic Materials Letters, 2016, 12, 329-337.	1.0	5
50	Multiple growth of graphene from a pre-dissolved carbon source. Nanotechnology, 2020, 31, 345601.	1.3	5
51	Recent progress of Carbon Nanotubes as cooling fins in electronic packaging. , 2008, , .		4
52	Use of Carbon nanotubes in potential electronics packaging applications. , 2010, , .		4
53	The effects of graphene-based films as heat spreaders for thermal management in electronic packaging. , 2016, , .		4
54	An overview of carbon nanotubes based interconnects for microelectronic packaging. , 2017, , .		4

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55	Detecting single molecules inside a carbon nanotube to control molecular sequences using inertia trapping phenomenon. Applied Physics Letters, 2012, 101, 133105.	1.5	3
56	Use of graphene-based films for hot spot cooling. , 2014, , .		3
57	Reliability of graphene-based films used for high power electronics packaging. , 2015, , .		3
58	2D heat dissipation materials for microelectronics cooling applications. , 2016, , .		3
59	Current status and progress of organic functionalization of CNT based thermal interface materials for electronics cooling applications. , 2017, , .		3
60	Preparation of polymer-metal nanocomposite films and performance evaluation as thermal interface material. , 2008, , .		2
61	A study of the heat transfer characteristics of the micro-channel heat sink. , 2009, , .		2
62	Reliability of carbon nanotube bumps for chip on glass application. , 2014, , .		2
63	Chemically vapor deposited carbon nanotubes for vertical electronics interconnect in packaging applications. , 2014, , .		2
64	Double-Densified Vertically Aligned Carbon Nanotube Bundles for Application in 3D Integration High Aspect Ratio TSV Interconnects. , 2016, , .		2
65	Thermal Reliability Study of Polymer Bonded Carbon Nanotube Array Thermal Interface Materials. , 2018, , .		2
66	Experimental Microwave Complex Conductivity Extraction of Vertically Aligned MWCNT Bundles for Microwave Subwavelength Antenna Design. Micromachines, 2019, 10, 566.	1.4	2
67	A Critical Assessment of Nano Enhanced Vapor Chamber Wick Structures for Electronics Cooling. , 2021, , .		2
68	Experimental study on electrical properties and stability of CNT bumps in high density interconnects. , 2013, , .		1
69	Enhanced heat spreader based on few-layer graphene intercalated with silane-functionalization molecules. , 2014, , .		1
70	Hotspot test structures for evaluating carbon nanotube microfin coolers and graphene-like heat spreaders. , 2016, , .		1
71	A study of fluid coolant with carbon nanotube suspension for microchannel coolers. , 2008, , .		0
72	Controlling the density of CNTs by different underlayer materials in PECVD growth. , 2013, , .		0

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73	Reliability of carbon nanotube bumps for chip on film application. , 2013, , .		0
74	Study on the verification of IR and RTD methods applied in the thermal measurement of high power chips. , 2014, , .		0
75	Carbon nanotube/solder hybrid structure for interconnect applications. , 2014, , .		0
76	Post-growth processing of carbon nanotubes for interconnect applications - a review. , 2016, , .		0
77	Graphene-CNT hybrid material as potential thermal solution in electronics applications. , 2017, , .		0
78	Improved reliability of electrically conductive adhesives joints on Cu-Plated PCB substrate enhanced by graphene protection barrier. , 2017, , .		0
79	RF Properties of Carbon Nanotube / Copper Composite Through Silicon Via Based CPW Structure for 3D Integrated Circuits. , 2019, , .		0
80	Exploring Graphene Coated Copper Nanoparticles as a multifunctional Nanofiller for Micro-Scaled Copper Paste. , 2021, , .		0