

Jeffrey T Glass

List of Publications by Year in descending order

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4576
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#	ARTICLE	IF	CITATIONS
1	(Digital Presentation) Graphenated Carbon Nanotube Based MEMS Supercapacitors. ECS Meeting Abstracts, 2022, MA2022-01, 638-638.	0.0	0
2	Decoration of Graphenated Carbon Nanotube Electrodes with Platinum Nanoparticles via Atomic Layer Deposition. ECS Meeting Abstracts, 2021, MA2021-02, 527-527.	0.0	0
3	High current density electron emission from an electrodeposited metal nanowire array. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 043204.	0.6	1
4	Integrated Flexible Conversion Circuit between a Flexible Photovoltaic and Supercapacitors for Powering Wearable Sensors. Journal of the Electrochemical Society, 2018, 165, B3122-B3129.	1.3	23
5	Polyethylenimine-Enhanced Electrocatalytic Reduction of CO ₂ to Formate at Nitrogen-Doped Carbon Nanomaterials. Journal of the American Chemical Society, 2014, 136, 7845-7848.	6.6	591
6	Perspectives on the Growth of High Edge Density Carbon Nanostructures: Transitions from Vertically Oriented Graphene Nanosheets to Graphenated Carbon Nanotubes. Journal of Physical Chemistry C, 2014, 118, 16126-16132.	1.5	15
7	Enhanced electron transfer kinetics through hybrid graphene-carbon nanotube films. Electrochemistry Communications, 2014, 48, 103-106.	2.3	29
8	Diamond surface functionalization with biomimicry "Amine surface tether and thiol moiety for electrochemical sensors. Applied Surface Science, 2014, 301, 293-299.	3.1	6
9	Selected topics on the synthesis, properties and applications of multiwalled carbon nanotubes. Diamond and Related Materials, 2014, 42, 49-57.	1.8	34
10	Compressive Mass Analysis on Quadrupole Ion Trap Systems. Journal of the American Society for Mass Spectrometry, 2014, 25, 1295-1304.	1.2	9
11	Solution-Processed, Antimony-Doped Tin Oxide Colloid Films Enable High-Performance TiO ₂ Photoanodes for Water Splitting. Nano Letters, 2013, 13, 1481-1488.	4.5	79
12	Modeling Operational Modes of a Bipolar Vacuum Microelectronic Device. IEEE Electron Device Letters, 2012, 33, 1498-1500.	2.2	0
13	Nothing is like a vacuum. Nature Nanotechnology, 2012, 7, 485-487.	15.6	55
14	Three-dimensional arrays of graphenated carbon nanotubes. Journal of Materials Research, 2012, 27, 1046-1053.	1.2	67
15	Electrochemical Charge Storage Properties of Vertically Aligned Carbon Nanotube Films: Effects of Thermal Oxidation. Journal of Physical Chemistry C, 2012, 116, 19526-19534.	1.5	4
16	Carbon nanostructures: A morphological classification for charge density optimization. Diamond and Related Materials, 2012, 23, 130-134.	1.8	30
17	Effect of porosity variation on the electrochemical behavior of vertically aligned multi-walled carbon nanotubes. Electrochemistry Communications, 2012, 19, 138-141.	2.3	19
18	Carbon Nanotube Electron Ionization Source for Portable Mass Spectrometry. Analytical Chemistry, 2011, 83, 6527-6531.	3.2	7

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19	Graphenated carbon nanotubes for enhanced electrochemical double layer capacitor performance. Applied Physics Letters, 2011, 99, 183104.	1.5	49
20	A Bipolar Vacuum Microelectronic Device. IEEE Transactions on Electron Devices, 2011, 58, 3189-3194.	1.6	4
21	High Knudsen number fluid flow at near-standard temperature and pressure conditions using precision nanochannels. Microfluidics and Nanofluidics, 2011, 10, 425-433.	1.0	17
22	Growth of vertically aligned bamboo-like carbon nanotubes from ammonia/methane precursors using a platinum catalyst. Carbon, 2011, 49, 266-274.	5.4	43
23	Electrochemical Charge Storage Properties of Vertically Aligned Carbon Nanotube Films: The Activation-Enhanced Length Effect. Journal of the Electrochemical Society, 2011, 158, K217.	1.3	3
24	The effect of gold on platinum oxidation in homogeneous Au-Pt electrocatalysts. Applied Surface Science, 2010, 257, 1431-1436.	3.1	14
25	A method to obtain a Ragone plot for evaluation of carbon nanotube supercapacitor electrodes. Journal of Materials Research, 2010, 25, 1500-1506.	1.2	35
26	Analysis of 3-panel and 4-panel microscale ionization sources. Journal of Applied Physics, 2010, 107, .	1.1	7
27	Development of a Micro Mass Spectrometer: Analysis of Particle Behavior in MEMS Ion Lens Systems. Microscopy and Microanalysis, 2009, 15, 242-243.	0.2	0
28	Simulation and testing of a lateral, microfabricated electron-impact ion source. Applied Physics Letters, 2009, 94, 044109.	1.5	5
29	Intellectual property (IP) management: organizational processes and structures, and the role of IP donations. Journal of Technology Transfer, 2008, 33, 549-559.	2.5	19
30	High voltage MEMS platform for fully integrated, on-chip, vacuum electronic devices. , 2008, , .		3
31	Alloying Effects of Cosputtered Gold-Platinum Thin Films on the Oxygen Reduction Reaction in Acidic Electrolyte. Journal of the Electrochemical Society, 2008, 155, B852.	1.3	25
32	Effect of film chemistry on refractive index of plasma-enhanced chemical vapor deposited silicon oxynitride films: A correlative study. Journal of Materials Research, 2008, 23, 1433-1442.	1.2	2
33	Measurement of reactive and condensable gas permeation using a mass spectrometer. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 1128-1137.	0.9	18
34	High voltage microelectromechanical systems platform for fully integrated, on-chip, vacuum electronic devices. Applied Physics Letters, 2008, 92, 224101.	1.5	12
35	High sensitivity permeation measurement system for "ultrabARRIER" thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 1587-1593.	0.9	10
36	A Novel Ion Source and Detector for a Miniature Mass Spectrometer. , 2007, , .		4

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37	On-chip electron-impact ion source using carbon nanotube field emitters. Applied Physics Letters, 2007, 90, 124102.	1.5	61
38	Effects of applied substrate bias during reactive sputter deposition of nanocomposite tantalum carbide/amorphous hydrocarbon thin films. Thin Solid Films, 2007, 515, 5403-5410.	0.8	9
39	Mechanical property development in reactively sputtered tantalum carbide/amorphous hydrocarbon thin films. Journal of Materials Research, 2006, 21, 1500-1511.	1.2	6
40	The formation of epitaxial hexagonal boron nitride on nickel substrates. Journal of Electronic Materials, 2005, 34, 1558-1564.	1.0	18
41	Influence of Deposition Parameters on the Composition and Structure of Reactively Sputtered Nanocomposite TaC/a-C:H Thin Films. Journal of Materials Research, 2005, 20, 2583-2596.	1.2	19
42	Verification of the O ²⁺ -Si ³⁺ -N complex in plasma-enhanced chemical vapor deposition silicon oxynitride films. Applied Physics Letters, 2005, 87, 261907.	1.5	35
43	Radial distribution function analyses of amorphous carbon thin films containing various levels of silicon and hydrogen. Journal of Applied Physics, 2004, 96, 273-279.	1.1	7
44	Relationships between the thermal stability, friction, and wear properties of reactively sputtered Si ³⁺ -a:C:H thin films. Journal of Materials Research, 2002, 17, 2888-2896.	1.2	7
45	Organizational designs for R&D. Academy of Management Perspectives, 2002, 16, 55-66.	4.3	42
46	The effects of structure, composition, and chemical bonding on the mechanical properties of Si-a:C:H thin films. Surface and Coatings Technology, 2002, 157, 197-206.	2.2	22
47	Preface to the Proceedings of the 7th European Conference on Diamond, Diamond-Like and Related Materials (Diamond Films '96), Tours, France, September 8 th -13, 1996. Diamond and Related Materials, 1997, 6, xi.	1.8	0
48	Preface to the Proceedings of the 6th European Conference on Diamond, Diamond-like and Related Materials (Diamond Films '95), Barcelona, Spain, September 10 th -15, 1995. Diamond and Related Materials, 1996, 5, xv.	1.8	1
49	Nucleation and Growth of Oriented Diamond Films on Nickel Substrates. Materials Research Society Symposia Proceedings, 1996, 423, 281.	0.1	1
50	Tem Analysis of the Observed Phases During the Growth of Oriented Diamond on Nickel Substrates. Materials Research Society Symposia Proceedings, 1996, 423, 457.	0.1	2
51	Investigation of the process factor space on bias-enhanced nucleation of diamond on silicon. Thin Solid Films, 1995, 261, 4-11.	0.8	13
52	Growth of diamond films using an enclosed combustion flame. Journal of Applied Physics, 1995, 78, 4144-4156.	1.1	18
53	Bias-enhanced nucleation of highly oriented diamond on titanium carbide (111) substrates. Applied Physics Letters, 1995, 66, 2810-2812.	1.5	39
54	Diamond deposition using a planar radio frequency inductively coupled plasma. Applied Physics Letters, 1995, 66, 3579-3581.	1.5	20

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55	Nucleation of oriented diamond particles on cobalt substrates. Journal of Applied Physics, 1995, 78, 1291-1296.	1.1	43
56	Field emission characteristics of diamond coated silicon field emitters. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 422.	1.6	71
57	Bias induced diamond nucleation studies on refractory metal substrates. Journal of Applied Physics, 1995, 77, 5119-5124.	1.1	46
58	Diamond nucleation and growth on reactive transition-metal substrates. Journal of Materials Research, 1995, 10, 1455-1460.	1.2	32
59	Nucleation and selected area deposition of diamond by biased hot filament chemical vapor deposition. Journal of Materials Research, 1995, 10, 425-430.	1.2	54
60	Comparison of silicon, nickel, and nickel silicide (Ni ₃ Si) as substrates for epitaxial diamond growth. Surface Science, 1995, 334, 179-194.	0.8	18
61	Investigation of the low angle grain boundaries in highly oriented diamond films via transmission electron microscopy. Journal of Materials Research, 1994, 9, 2487-2489.	1.2	13
62	Diamond nucleation on nickel substrates seeded with non-diamond carbon. Journal of Materials Research, 1994, 9, 1063-1066.	1.2	28
63	Electron emission from diamond coated silicon field emitters. Applied Physics Letters, 1994, 65, 2842-2844.	1.5	93
64	The effect of substrate material on bias-enhanced diamond nucleation. Diamond and Related Materials, 1994, 3, 1188-1195.	1.8	22
65	Effect of native SiO ₂ layer on the nucleation of diamond using a combustion flame. Diamond and Related Materials, 1994, 3, 239-244.	1.8	6
66	The origin of the broadband luminescence and the effect of nitrogen doping on the optical properties of diamond films. Journal of Applied Physics, 1994, 76, 3020-3027.	1.1	129
67	Combustion growth of large diamond crystals. Journal of Crystal Growth, 1993, 129, 45-55.	0.7	16
68	Fabrication of diamond thin-film thermistors for high-temperature applications. Diamond and Related Materials, 1993, 2, 816-819.	1.8	47
69	Nucleation and growth of diamond using a computer-controlled oxy-acetylene torch. Diamond and Related Materials, 1993, 2, 438-442.	1.8	7
70	Correlation of interface chemistry to electrical properties of metal contacts on diamond. Diamond and Related Materials, 1993, 2, 963-969.	1.8	17
71	Microphotoluminescence and Raman scattering study of defect formation in diamond films. Journal of Applied Physics, 1993, 73, 3951-3957.	1.1	89
72	Nucleation of oriented diamond films on nickel substrates. Journal of Materials Research, 1993, 8, 1773-1776.	1.2	84

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73	Effect of surface hydrogen on metal-diamond interface properties. Journal of Applied Physics, 1993, 73, 835-842.	1.1	24
74	Titanium carbide rectifying contacts on boron-doped polycrystalline diamond. Diamond and Related Materials, 1993, 2, 37-40.	1.8	11
75	Geometric modeling of the diamond- β -SiC heteroepitaxial interface. Diamond and Related Materials, 1993, 2, 590-596.	1.8	5
76	Epitaxial nucleation of diamond on β -SiC via bias-enhanced microwave plasma chemical vapor deposition. Diamond and Related Materials, 1993, 2, 142-146.	1.8	103
77	Oriented nucleation and growth of diamond films on β -SiC and Si. Applied Physics Letters, 1993, 63, 1792-1794.	1.5	84
78	Diamond and β -SiC heteroepitaxial interfaces: A theoretical and experimental study. Physical Review B, 1993, 47, 6529-6542.	1.1	78
79	Oriented diamond films grown on nickel substrates. Applied Physics Letters, 1993, 63, 1640-1642.	1.5	109
80	Textured growth of diamond on silicon via nitric acid carburization and bias-enhanced nucleation. Applied Physics Letters, 1993, 62, 1215-1217.	1.5	325
81	Twinning and faceting in early stages of diamond growth by chemical vapor deposition. Journal of Materials Research, 1992, 7, 3001-3009.	1.2	90
82	<i>In situ</i> growth rate measurement and nucleation enhancement for microwave plasma CVD of diamond. Journal of Materials Research, 1992, 7, 257-260.	1.2	80
83	Improved uniformity and selected area deposition of diamond by the oxy-acetylene flame method. Journal of Materials Research, 1992, 7, 2144-2150.	1.2	15
84	Effects of argon presputtering on the formation of aluminum contacts on polycrystalline diamond. Journal of Applied Physics, 1992, 72, 5912-5918.	1.1	21
85	Correlation of the electrical properties of metal contacts on diamond films with the chemical nature of the metal-diamond interface. II. Titanium contacts: A carbide-forming metal. Physical Review B, 1992, 45, 11975-11981.	1.1	136
86	Textured diamond growth on (100) β -SiC via microwave plasma chemical vapor deposition. Applied Physics Letters, 1992, 60, 698-700.	1.5	385
87	Correlation of the electrical properties of metal contacts on diamond films with the chemical nature of the metal-diamond interface. I. Gold contacts: A non-carbide-forming metal. Physical Review B, 1992, 45, 11968-11974.	1.1	51
88	Pulsed Laser Deposition of CdTe, HgCdTe, and β -SiC Thin Films on Silicon. Materials Research Society Symposia Proceedings, 1992, 268, 235.	0.1	0
89	Early Nucleation of Diamond in a Combustion Flame. Materials Research Society Symposia Proceedings, 1992, 270, 323.	0.1	1
90	Diamond Growth in an Oxy-Acetylene Flame by an Alternating Gas Ratio Technique. Materials Research Society Symposia Proceedings, 1992, 270, 329.	0.1	1

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91	Electrical Conductivity as a Function of Temperature of Diamond films Grown by Downstream Microwave Plasma Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 1992, 270, 413.	0.1	1
92	In-Vacuo Surface Analytical Study of Diamond Nucleation on Copper Vs. Silicon. Materials Research Society Symposia Proceedings, 1992, 270, 347.	0.1	4
93	Effects of boron doping on the surface morphology and structural imperfections of diamond films. Diamond and Related Materials, 1992, 1, 828-835.	1.8	53
94	A review of the electrical characteristics of metal contacts on diamond. Thin Solid Films, 1992, 212, 19-24.	0.8	65
95	Electrical conductivity and photoluminescence of diamond films grown by downstream microwave plasma CVD. Journal of Electronic Materials, 1992, 21, 629-634.	1.0	17
96	Analysis via transmission electron microscopy of the quality of diamond films deposited from the vapor phase. Diamond and Related Materials, 1991, 1, 25-32.	1.8	26
97	Large-area mosaic diamond films approaching single-crystal quality. Applied Physics Letters, 1991, 58, 2485-2487.	1.5	74
98	Microfabrication of diamond films: selective deposition and etching. Surface and Coatings Technology, 1991, 47, 465-473.	2.2	9
99	Observation of surface modification and nucleation during deposition of diamond on silicon by scanning tunneling microscopy. Journal of Applied Physics, 1991, 69, 6400-6405.	1.1	35
100	The role of geometric considerations in the diamond-cubic boron nitride heteroepitaxial system. Journal of Applied Physics, 1991, 69, 2679-2681.	1.1	12
101	Material and electrical characterization of polycrystalline boron-doped diamond films grown by microwave plasma chemical vapor deposition. Journal of Applied Physics, 1991, 69, 3142-3148.	1.1	149
102	Electron microscopic characterization of diamond films grown on Si by bias-controlled chemical vapor deposition. Journal of Materials Research, 1990, 5, 2367-2377.	1.2	48
103	Electron Microscopy of Defects in Epitaxial beta-SiC Thin Films Grown on Silicon and Carbon {0001} Faces of alpha-SiC Substrates. Journal of the American Ceramic Society, 1990, 73, 1283-1288.	1.9	8
104	Effect of Substrate Orientation on Interfacial and Bulk Character of Chemically Vapor Deposited Monocrystalline Silicon Carbide Thin Films. Journal of the American Ceramic Society, 1990, 73, 1289-1296.	1.9	7
105	Properties and applications of vapor grown diamond. Carbon, 1990, 28, 756-757.	5.4	0
106	Determination of impurity dopant distributions in diamond films by SIMS. Carbon, 1990, 28, 801.	5.4	0
107	The analysis of defect structures and substrate/film interfaces of diamond thin films. Journal of Crystal Growth, 1990, 99, 1168-1176.	0.7	37
108	Vapor deposition of diamond thin films on various substrates. Applied Physics Letters, 1990, 57, 1916-1918.	1.5	52

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109	Bias-controlled chemical vapor deposition of diamond thin films. Applied Physics Letters, 1990, 56, 620-622.	1.5	38
110	Electron microscopy of vapor phase deposited diamond. Journal of Materials Research, 1990, 5, 801-810.	1.2	68
111	Analysis of the composite structures in diamond thin films by Raman spectroscopy. Physical Review B, 1990, 41, 3738-3745.	1.1	532
112	Growth rate, surface morphology, and defect microstructures of β -SiC films chemically vapor deposited on 6H-SiC substrates. Journal of Materials Research, 1989, 4, 204-214.	1.2	91
113	Characterization of diamond thin films: Diamond phase identification, surface morphology, and defect structures. Journal of Materials Research, 1989, 4, 373-384.	1.2	256
114	The effects of thermal annealing on the microstructural, optical and electrical properties of beta silicon carbide films implanted with boron or nitrogen. Journal of Electronic Materials, 1989, 18, 157-165.	1.0	12
115	The Effect of Phosphoric Acid Concentration on Electrocatalysis. Journal of the Electrochemical Society, 1989, 136, 656-660.	1.3	36
116	Critical evaluation of the status of the areas for future research regarding the wide band gap semiconductors diamond, gallium nitride and silicon carbide. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1988, 1, 77-104.	1.7	227
117	Chemical vapor deposition and characterization of 6H-SiC thin films on off-axis 6H-SiC substrates. Journal of Applied Physics, 1988, 64, 2672-2679.	1.1	213
118	An examination of double positioning boundaries and interface misfit in β -SiC films on α -SiC substrates. Journal of Applied Physics, 1988, 63, 2645-2650.	1.1	94
119	Electrical Contacts to Beta Silicon Carbide Thin Films. Journal of the Electrochemical Society, 1988, 135, 359-362.	1.3	63
120	The Electrochemical Stability and Calculated Free Energies of PtCr Alloys. Journal of the Electrochemical Society, 1988, 135, 1650-1658.	1.3	10
121	The Effect of Metallurgical Variables on the Electrocatalytic Properties of PtCr Alloys. Journal of the Electrochemical Society, 1987, 134, 58-65.	1.3	92
122	Temperature dependence of the current-voltage characteristics of metal-semiconductor field-effect transistors in β -SiC grown via chemical vapor deposition. Applied Physics Letters, 1987, 51, 442-444.	1.5	47
123	Epitaxial growth of β -SiC thin films on 6H-SiC substrates via chemical vapor deposition. Applied Physics Letters, 1986, 49, 1074-1076.	1.5	75
124	High Voltage Compatible Micromachined Vacuum Electronic Devices with Carbon Nanotube Cold Cathodes. , 0, , .		0