Raman spectroscopy study of detonation nanodiamond

Diamond and Related Materials

87, 248-260

DOI: 10.1016/j.diamond.2018.06.001

Citation Report

#	Article	IF	Citations
1	Raman Spectra of Nonpolar Crystalline Nanoparticles: Elasticity Theory-like Approach for Optical Phonons. Journal of Physical Chemistry C, 2018, 122, 22738-22749.	1.5	10
2	FTIR spectroscopy of nanodiamonds: Methods and interpretation. Diamond and Related Materials, 2018, 89, 52-66.	1.8	214
3	sp²/sp³ Framework from Diamond Nanocrystals: A Key Bridge of Carbonaceous Structure to Carbocatalysis. ACS Catalysis, 2019, 9, 7494-7519.	5.5	86
4	Nickel-nanodiamond coatings electrodeposited from tartrate electrolyte at ambient temperature. Surface and Coatings Technology, 2019, 380, 125063.	2.2	31
5	Combined Tribological and Bactericidal Effect of Nanodiamonds as a Potential Lubricant for Artificial Joints. ACS Applied Materials & Interfaces, 2019, 11, 43500-43508.	4.0	30
6	Improvement of Voltammetric Detection of Sulfanilamide with a Nanodiamond-Modified Glassy Carbon Electrode. International Journal of Electrochemical Science, 2019, 14, 7858-7870.	0.5	17
7	Determination of crystallite size of nanodiamond by Raman spectroscopy. Diamond and Related Materials, 2019, 99, 107524.	1.8	9
8	Tribological Performance of Nanocomposite Carbon Lubricant Additive. Materials, 2019, 12, 149.	1.3	6
9	Facile in-situ simultaneous electrochemical reduction and deposition of reduced graphene oxide embedded palladium nanoparticles as high performance electrode materials for supercapacitor with excellent rate capability. Electrochimica Acta, 2019, 314, 124-134.	2.6	93
10	Does Twinning Impact Structure/Property Relationships in Diamond Nanoparticles?. Journal of Physical Chemistry C, 2019, 123, 11207-11215.	1.5	9
11	Removing Non-Size-Dependent Electron Spin Decoherence of Nanodiamond Quantum Sensors by Aerobic Oxidation. ACS Applied Nano Materials, 2019, 2, 3701-3710.	2.4	22
12	The Influence of Nanocomposite Carbon additive on Tribological Behavior of Cylinder Liner/Piston Ring. IOP Conference Series: Materials Science and Engineering, 2019, 491, 012017.	0.3	4
13	Using hydrogen isotope incorporation as a tool to unravel the surfaces of hydrogen-treated nanodiamonds. Nanoscale, 2019, 11, 8027-8036.	2.8	12
14	Efficient surface functionalization of detonation nanodiamond using ozone under ambient conditions. Nanoscale, 2019, 11, 8012-8019.	2.8	25
15	Facile route to porous polyaniline@nanodiamond-graphene based nanohybrid structures for DC electrical conductivity retention and supercapacitor applications. Journal of Polymer Research, 2019, 26, 1.	1.2	13
16	Investigating the Possible Origin of Raman Bands in Defective sp2/sp3 Carbons below 900 cmâ˜'1: Phonon Density of States or Double Resonance Mechanism at Play?. Journal of Carbon Research, 2019, 5, 79.	1.4	19
17	Features of the 1640 cm^{â˜'1} band in the Raman spectra of radiation-damaged and nano-sized diamonds. Journal of Physics: Conference Series, 2019, 1400, 044017.	0.3	4
18	CVD Diamond. Transactions of the Indian Institute of Metals, 2019, 72, 1-9.	0.7	10

#	Article	IF	Citations
19	Nitrogen-doped nanodiamond films grown just by heating solid precursor thin layers for field emission application. Journal Physics D: Applied Physics, 2020, 53, 015101.	1.3	5
22	Lifetimes of confined optical phonons and the shape of a Raman peak in disordered nanoparticles. II. Numerical treatment. Physical Review B, 2020, 102, .	1.1	7
23	Mechanical tests of elastomeric nanocomposites with fillers of various shapes (grains, plates, fibers). AIP Conference Proceedings, 2020, , .	0.3	0
24	Novel 0D-nanocarbon-silica ceramic composites: solâ€“gel synthesis and high-temperature evolution. Dalton Transactions, 2020, 49, 7144-7154.	1.6	4
25	Surface modification effects of graphite for selective hydrogen absorption by titanium at room temperature. Chemical Communications, 2020, 56, 7237-7240.	2.2	3
26	Hydrogen plasma treated nanodiamonds lead to an overproduction of hydroxyl radicals and solvated electrons in solution under ionizing radiation. Carbon, 2020, 162, 510-518.	5.4	21
27	Spark plasma sintering compaction of hybrid nanodiamond/carbon nanotubes/metal electrode and its application. Diamond and Related Materials, 2020, 104, 107746.	1.8	5
28	Covalent Functionalization of Nanodiamonds by Ruthenium Porphyrin, and Their Catalytic Activity in the Cyclopropanation Reaction of Olefins. Catalysts, 2020, 10, 666.	1.6	1
29	Synthesis of Au Nanoparticles Decorated Carbon Nanotubes as an Electrochemical Sensor for Phenol Determination in Petrochemical Wastewater. International Journal of Electrochemical Science, 2020, , 6177-6187.	0.5	6
30	An overlooked effect induced by surface modification: different molecular response of Chlorella pyrenoidosa to graphitized and oxidized nanodiamonds. Environmental Science: Nano, 2020, 7, 2302-2312.	2.2	12
31	Surface Modification of Ultradisperse Diamonds by Vacuum Heat Treatment. Journal of Applied Spectroscopy, 2020, 87, 26-34.	0.3	2
32	Thermoluminescence response of detonation diamond microparticles exposed to beta and alpha radiation. Diamond and Related Materials, 2020, 106, 107823.	1.8	2
33	Manifestation of anharmonicities in terms of phonon modesâ€™ energy and lifetime in multiwall carbon nanotubes. Carbon, 2021, 171, 568-574.	5.4	23
34	Size and nitrogen inhomogeneity in detonation and laser synthesized primary nanodiamond particles revealed via salt-assisted deaggregation. Carbon, 2021, 171, 230-239.	5.4	17
35	Nanodiamonds: From synthesis to applications. , 2021, , 209-246.		0
36	Size Effects on Surface Chemistry and Raman Spectra of Sub-5 nm Oxidized High-Pressure High-Temperature and Detonation Nanodiamonds. Journal of Physical Chemistry C, 2021, 125, 5647-5669.	1.5	25
37	Low-Temperature CO₂ Thermal Reduction to Graphitic and Diamond-like Carbons Using Perovskite-Type Titanium Nanoceramics by Quasi-High-Pressure Reactions. ACS Sustainable Chemistry and Engineering, 2021, 9, 3860-3873.	3.2	5
38	Carbon Nanomaterials: Synthesis, Functionalization and Sensing Applications. Nanomaterials, 2021, 11, 967.	1.9	132

#	Article	IF	Citations
39	Transformation of Nanodiamonds to Onion-like Carbons by Ambient Electrospray Deposition. Journal of Physical Chemistry C, 2021, 125, 10998-11006.	1.5	5
40	Valorization of agro-industrial fruit peel waste to fluorescent nanocarbon sensor: Ultrasensitive detection of potentially hazardous tropane alkaloid. Frontiers of Environmental Science and Engineering, 2021, 16, 1.	3.3	11
41	Plasma & Microwaves as Greener Options for Nanodiamond Purification: Insight Into Cytocompatibility. Frontiers in Bioengineering and Biotechnology, 2021, 9, 637587.	2.0	4
42	Room-temperature synthesis of various allotropes of carbon nanostructures (graphene, graphene) Tj ETQq1 1 0.784314 rgBT /Overlock using ethanol and potassium hydroxide. Carbon, 2021, 179, 133-141.	5.4	17
43	Advances in laser-assisted conversion of polymeric and graphitic carbon into nanodiamond films. Nanotechnology, 2021, 32, .	1.3	12
44	Laser-Induced Modification of Hydrogenated Detonation Nanodiamonds in Ethanol. Nanomaterials, 2021, 11, 2251.	1.9	3
45	Role of Nanodiamond Grains in the Exfoliation of WS₂ Nanosheets and Their Enhanced Hydrogen-Sensing Properties. ACS Applied Materials & Interfaces, 2021, 13, 48260-48269.	4.0	5
46	Raman Spectroscopy Characterization of Carbon Materials: From Graphene to All-carbon Heterostructures. , 2021, , 317-346.		2
47	Investigation of Vacuum Annealing Temperature Effects on the Microstructure Properties of DC-PECVD Grown Diamond Nanoparticles. Journal of Inorganic and Organometallic Polymers and Materials, 2021, 31, 1704-1712.	1.9	1
48	Evidence of absorption dominating over scattering in light attenuation by nanodiamonds. Physical Review Research, 2020, 2, .	1.3	8
49	Synthesis of nanocrystalline diamond embedded diamond-like carbon films on untreated glass substrates at low temperature using (C2H2Â+ÂH2) gas composition in microwave plasma CVD. Applied Surface Science, 2022, 579, 152132.	3.1	17
50	High-temperature evolution of diamond-SiC composites. Processing and Application of Ceramics, 2022, 16, 69-77.	0.4	0
51	Nanodiamonds as traps for fibroblast growth factors: Parameters influencing the interaction. Carbon, 2022, 195, 372-386.	5.4	10
52	Monoatomic tantalum induces ordinary-pressure phase transition from graphite to n-type diamond. Carbon, 2022, 196, 466-473.	5.4	8
53	Physiochemical evaluations, mechanical attenuations and thermal stability of graphene nanosheets and functionalized nanodiamonds loaded pitch derived carbon foam composites. Diamond and Related Materials, 2022, 126, 109077.	1.8	35
54	Enhancing Degradation Resistance of Biomedical Mg-6zn-0.5zr Alloy by the Incorporation of Nanodiamond. SSRN Electronic Journal, 0, , .	0.4	0
55	Ultrasmall Nanodiamonds: Perspectives and Questions. ACS Nano, 2022, 16, 8513-8524.	7.3	19
56	Raman signatures of detonation soot. Journal of Raman Spectroscopy, 2022, 53, 1571-1579.	1.2	6

#	Article	IF	Citations
57	Diamond-rich crystalline nanosheets seeded with a Langmuir monolayer of arachidic acid on water. RSC Advances, 2022, 12, 26575-26579.	1.7	0
58	Enhancing Degradation Resistance of Biomedical Mg-6Zn-0.5Zr Alloy by the Incorporation of Nanodiamond. Materials, 2022, 15, 6707.	1.3	2
59	Recovery of release cloud from laser shock-loaded graphite and hydrocarbon targets: in search of diamonds. Journal Physics D: Applied Physics, 2023, 56, 025301.	1.3	4
60	Detonation Synthesis Nanodiamond Soot as a Promising Filler for Polymer Composites. Journal of Carbon Research, 2022, 8, 69.	1.4	2
61	The rocky road to organics needs drying. Nature Communications, 2023, 14, .	5.8	4
62	Hydrogenation of HPHT nanodiamonds and their nanoscale interaction with chitosan. Diamond and Related Materials, 2023, 134, 109754.	1.8	8
63	Surface Tamm States of 2â€“5 nm Nanodiamond via Raman Spectroscopy. Nanomaterials, 2023, 13, 696.	1.9	2
64	Biocompatible Nanodiamonds Derived from Coal Washery Rejects: Antioxidant, Antiviral, and Phytotoxic Applications. ACS Omega, 2023, 8, 11151-11160.	1.6	1