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## Prediction of new low compressibility solids

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2303	Evidence for multiple sources of diamond from primitive chondrites. <i>Science</i> , <b>1991</b> , 254, 1188-91	33.3	67
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2107	Influence of Deposition Temperatures on Bonding State and Microstructure of Carbon Nitride Thin Films Prepared by Ion-Beam-Assisted Deposition. <b>1997</b> , 36, 2313-2318	21
2106	Optical emission spectroscopy of the nitrogen arc in an arc-heated beam source used for synthesis of carbon nitride films. <b>1997</b> , 30, 1370-1376	17
2105	Amorphous Carbon Nitride Hard Coatings by Multistep Shielded Arc Ion Plating. <b>1997</b> , 36, 4901-4906	10
2104	Formation of Carbon Nitride Films by the Radio-Frequency Plasma Chemical Vapor Deposition Method. <b>1997</b> , 36, 4893-4896	17
2103	Carbon Nitride Films Produced Using Electron Cyclotron Resonance Nitrogen Plasmas. <b>1997</b> , 36, 4897-4900	9
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2073	Preparation and Properties of a New Hard Material of Composition C <sub>3</sub> N <sub>3.6-4.5</sub> O <sub>1.1-1.2</sub> H <sub>4.1-4.2</sub> . <b>1997</b> , 26, 1003-1004	16
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2068	Effect of ultraviolet light irradiation on amorphous carbon nitride films. <b>1997</b> , 82, 4912-4915	43
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2066	Hard a-C(N):H films obtained from plasma decomposition of methylamine-containing mixtures. <b>1997</b> , 6, 631-634	22
2065	Preparation of crystalline carbon nitride films on silicon substrate by chemical vapor deposition. <b>1997</b> , 6, 635-639	28
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2063	Nitrogen modification of hydrogenated amorphous carbon films. <b>1997</b> , 81, 2626-2634	319
2062	Optical properties of nitrogen-rich carbon films deposited by d.c. magnetron sputtering. <b>1997</b> , 6, 33-40	39
2061	Pulsed laser deposition of carbon nitride thin films in nitrogen gas ambient. <b>1997</b> , 12, 3376-3379	16
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2058	Structure and mechanical properties of hard amorphous carbon-nitrogen films obtained by plasma decomposition of methane-ammonia mixtures. <b>1997</b> , 293, 236-243	73
2057	Nitrogen 1s electron binding energy assignment in carbon nitride thin films with different structures. <b>1997</b> , 87, 45-49	74
2056	Production and characterisation of carbon nitride thin films produced by a graphite hollow cathode system. <b>1997</b> , 308-309, 228-232	15
2055	The composition and bonding structure of CN <sub>x</sub> films and their influence on the mechanical properties. <b>1997</b> , 308-309, 130-134	24
2054	Optical and mechanical properties of amorphous CN films. <b>1997</b> , 308-309, 135-140	20
2053	Reactive magnetron sputtering of CN <sub>x</sub> thin films at different substrate bias. <b>1997</b> , 308-309, 223-227	39
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2051	Preparation of carbon nitride thin films by ion beam assisted deposition and their mechanical properties. <b>1997</b> , 308-309, 239-244	47
2050	Deposition of carbon nitride films by vacuum ion diode with explosive emission. <b>1997</b> , 308-309, 233-238	6
2049	Superhard coatings of CN <sub>x</sub> /ZrN multilayers prepared by DC magnetron sputtering. <b>1997</b> , 308-309, 113-117	35
2048	Plasma immersion ion implantation for materials modification and semiconductor processing: Carbon nitride films and poly-Si TFTs hydrogenation. <b>1997</b> , 121, 226-230	0
2047	Carbon nitride films synthesized by dual ion beam sputtering. <b>1997</b> , 122, 534-537	11
2046	Carbon nitride thin films formed by low energy ion beam deposition with positive and negative ions. <b>1997</b> , 121, 73-78	20
2045	Investigations on structural properties of carbon nitride films synthesized by reactive ionized cluster beam deposition. <b>1997</b> , 122, 239-243	17
2044	Boron-carbon-nitrogen films synthesized by laser ablation under ion beam bombardment. <b>1997</b> , 50, 98-101	8
2043	Recent developments in hard materials. <b>1997</b> , 15, 3-12	50
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2041	Effect on selected-phase growth of crystalline C-N films by controlling nitrogen, hydrogen and methane mixture. <b>1997</b> , 16, 594-597	15
2040	Deposition of CN <sub>x</sub> thin films by plasma-activated chemical vapour deposition using various precursors as carbon source. <b>1997</b> , 32, 2849-2853	10
2039	Synthesis and characterization of C <sub>3</sub> N <sub>4</sub> crystal (I). <b>1997</b> , 40, 658-661	3
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2036	Structural and hardness studies of CN X /TiN composite coatings on Si (100) substrates by laser ablation method. <b>1997</b> , 6, 583-585	5
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2033	Tribological properties of B <sub>4</sub> C thin films deposited by magnetron-sputter-ion plating method. <b>1997</b> , 91, 167-173	30
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2029	Carbon nitride films prepared by excimer laser ablation. <b>1997</b> , 109-110, 380-383	41
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2024	Shielded arc ion plating and structural characterization of amorphous carbon nitride thin films. <b>1997</b> , 304, 183-190	86

2023	Characterization of C-N thin films deposited by reactive excimer laser ablation of graphite targets in nitrogen atmosphere. <b>1997</b> , 307, 54-59	29
2022	Theoretical investigation of graphitic carbon nitride and possible tubule forms. <b>1997</b> , 102, 605-608	198
2021	High pressure X-ray diffraction study of $\beta$ -Si <sub>3</sub> N <sub>4</sub> . <b>1997</b> , 103, 107-112	37
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2012	Identification of a new C <sub>2</sub> N phase with monoclinic structure. <b>1997</b> , 268, 26-30	34
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2009	Influence of process parameters on CN <sub>x</sub> films obtained by laser-CVD at two wavelengths. <b>1998</b> , 36, 775-780	6
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2007	Carbon nitride thin films prepared by reactive r.f. Magnetron sputtering. <b>1998</b> , 36, 757-760	12
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1998	Formation of CN <sub>x</sub> compounds by N-implantation into diamond films. <b>1998</b> , 135, 224-228	11
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1995	An application of multicapillary excited beam source to fabricate nitrogen-containing carbon thin films. <b>1998</b> , 54, 251-254	
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1993	Deposition of B <sub>2</sub> C <sub>3</sub> N coatings from trisdimethylaminoboran by hot-filament and microwave plasma activation. <b>1998</b> , 16, 233-241	13
1992	Carbon Nitride Films Deposited on <111> Si Substrates by Reactive Excimer Laser Ablation. <b>1998</b> , 166, 581-586	4
1991	Morphological behaviour of osteoblasts on diamond-like carbon coating and amorphous C-N film in organ culture. <b>1998</b> , 19, 651-8	109
1990	Deposition of carbon nitride thin films by arc ion plating. <b>1998</b> , 317, 380-383	6
1989	New development in superhard coatings: the superhard nanocrystalline-amorphous composites. <b>1998</b> , 317, 449-454	171
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1987	Characteristics of carbon nitride films prepared by magnetic filtered plasma stream. <b>1998</b> , 323, 217-221	32
1986	Properties of carbon nitride films deposited by magnetron sputtering. <b>1998</b> , 332, 56-61	59
1985	Vibrational properties of carbon nitride films by Raman spectroscopy. <b>1998</b> , 332, 62-68	137
1984	Preparation of CN <sub>x</sub> -phases using plasma-assisted and hot filament chemical vapour deposition. <b>1998</b> , 332, 69-73	16
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1981	Bulk modulus of ternary chalcopyrite AIBIIC <sub>2</sub> VI and AIBIVC <sub>2</sub> V semiconductors. <b>1998</b> , 107, 369-371	20
1980	XPS study of plasma treated carbon layers deposited on porous silicon. <b>1998</b> , 56, 1-4	5
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1978	XPS and FTIR analysis of nitrogen incorporation in CN <sub>x</sub> thin films. <b>1998</b> , 98, 1092-1096	38
1977	Preparation and characterization of RF-PECVD deposited films containing EC <sub>3</sub> NN <sub>4</sub> microcrystallites. <b>1998</b> , 99, 184-190	21
1976	Influence of the surface treatment of the substrate in the LCVD of CN <sub>x</sub> films. <b>1998</b> , 100-101, 173-179	7
1975	Recent progress on the tribology of doped diamond-like and carbon alloy coatings: a review. <b>1998</b> , 100-101, 180-186	391
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1970	Nitrogen driven structural transformation in carbon nitride materials. <b>1998</b> , 127-129, 569-573	14

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1961	An XPS study of carbon nitride synthesized by ion beam nitridation of C60 fullerene. <b>1998</b> , 7, 402-406	55
1960	Raman spectroscopy of annealed carbon nitride films deposited by RF-magnetron sputtering. <b>1998</b> , 7, 412-416	21
1959	Electronic structure of hydrogenated carbon nitride films. <b>1998</b> , 16, 2941-2949	154
1958	Diffraction-pattern calculation and phase identification of hypothetical crystalline C <sub>3</sub> N <sub>4</sub> . <b>1998</b> , 58, 11890-11895	9
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1956	Computational Alchemy: The Search for New Superhard Materials. <b>1998</b> , 23, 22-27	682
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1954	Amorphous B <sub>11</sub> N semiconductor. <b>1998</b> , 84, 1412-1415	46
1953	HIGH-PRESSURE SYNTHESIS, CHARACTERIZATION, AND TUNING OF SOLID STATE MATERIALS. <b>1998</b> , 28, 631-658	150
1952	Micro-Raman spectroscopy investigation of C <sub>3</sub> N <sub>4</sub> crystals deposited on nickel substrates. <b>1998</b> , 7, 52-56	25

1951	The mechanical, tribological and optical properties of CN <sub>x</sub> coatings prepared by sputtering methods. <b>1998</b> , 7, 417-421	6
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1949	COMPUTATIONAL MATERIALS SCIENCE: Predicting Properties from Scratch. <i>Science</i> , <b>1998</b> , 280, 1099-1103	63
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1937	The Effect of D.C. Bias on the Synthesis of Crystalline Carbon Nitrides on Silicon by Microwave Plasma Enhanced Chemical Vapor Deposition (CVD). <b>1998</b> , 37, L148-L150	26
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1935	Enhanced Growth of EC 3N 4 Crystallites at a High Substrate Temperature. <b>1998</b> , 37, L1058-L1061	8
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1922	Nitrogen in germanium. <b>1998</b> , 84, 1-30	81
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1919	A model of bonding and band-forming for oxides and nitrides. <b>1998</b> , 72, 1706-1708	47
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1917	Kinetic energy influence of hyperthermal dual ion beams on bonding and optical properties of carbon nitride films. <b>1998</b> , 72, 1412-1414	10
1916	Electronic and optical properties of carbon nitride thin films synthesized by laser ablation under ion beam bombardment. <b>1998</b> , 84, 2133-2137	26

1915	Electron cyclotron resonance assisted chemical vapor deposition of carbon nitride films on diamond. <b>1998</b> , 83, 1702-1704	20
1914	Extraction of molecular negative-ion beams of CN from radio frequency plasma-sputter-type heavy negative ion source for negative-ion beam deposition. <b>1998</b> , 69, 884-886	3
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1903	Low Temperature Synthesis of Si-C-N and C-N Films by IR-laser Assisted ECR-PECVD. <b>1998</b> , 555, 365	
1902	Laser Assisted Deposition of Carbon Nitride Coatings. <b>1998</b> , 555, 387	
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1844	Influence of deposition condition and hydrogen on amorphous-to-polycrystalline SiCN films. <b>1999</b> , 348, 114-121	52

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1716	Carbon nitride films deposited by very high-fluence XeCl excimer-laser reactive ablation. <b>2000</b> , 154-155, 369-375	10
1715	Pulsed laser deposition of a-CN <sub>x</sub> :H films: the role of target-to-substrate distance and laser fluence. <b>2000</b> , 154-155, 454-457	5
1714	UV laser photodeposition of carbon nitride thin films from gaseous precursors. <b>2000</b> , 154-155, 393-398	3
1713	Structural analysis and microstructural observation of SiC <sub>x</sub> N <sub>y</sub> films prepared by reactive sputtering of SiC in N <sub>2</sub> and Ar. <b>2000</b> , 156, 155-160	90
1712	In situ and ex situ characterization of thin films by soft X-ray emission spectroscopy. <b>2000</b> , 110-111, 41-67	18
1711	Characterization of carbon nitride thin films deposited by microwave plasma chemical vapor deposition. <b>2000</b> , 127, 259-264	16
1710	Multilayer CN <sub>x</sub> /TiN composite films prepared by multi-arc assisted DC reactive magnetron sputtering. <b>2000</b> , 128-129, 144-149	12
1709	The luminescence of CN <sub>x</sub> thin films formed by nitrogen ion implantation on a diamond film. <b>2000</b> , 128-129, 320-323	
1708	Preparation of multi-layer carbon nitride films by alternate processes of magnetron sputtering and ion beam implantation. <b>2000</b> , 131, 428-432	3
1707	A review of investigations on biocompatibility of diamond-like carbon and carbon nitride films. <b>2000</b> , 131, 481-487	318
1706	The effect of nitrogen partial pressure on the bonding in sputtered CN <sub>x</sub> films: implications for formation of EC <sub>3</sub> N <sub>4</sub> . <b>2000</b> , 131, 488-492	12
1705	Tribochemical effects on CN <sub>x</sub> films. <b>2000</b> , 133-134, 430-436	25
1704	Physical properties of carbon nitride films synthesized using atomic transport reactions. <b>2000</b> , 125, 278-283	14
1703	Magnetron sputtered carbon nitride: composition and chemical bonding of as-grown and post-annealed films studied with real-time and in situ diagnostic techniques. <b>2000</b> , 125, 289-294	13
1702	Synthesis and characterization of carbon nitride thin films obtained by laser induced chemical vapour deposition. <b>2000</b> , 125, 301-307	18
1701	Chemical analysis of pulsed laser deposited a-CN <sub>x</sub> films by comparative infrared and X-ray photoelectron spectroscopies. <b>2000</b> , 125, 308-312	59
1700	X-ray photoelectron spectroscopy study of carbon nitride films. <b>2000</b> , 125, 313-316	12

1699	Tribological and mechanical properties of carbon nitride films deposited by ionised magnetron sputtering. <b>2000</b> , 124, 104-109	22
1698	Ab initio/Rice-Ramsperger-Kassel-Marcus approach to carbon nitride formation: CH <sub>3</sub> NH <sub>2</sub> decomposition. <b>2000</b> , 321, 101-105	8
1697	Structural and vibrational characterization of hydrogenated carbon nitride thin films obtained by laser-induced CVD. <b>2000</b> , 168, 44-47	5
1696	Optical and morphological properties of laser photo-deposited hydrogenated CN <sub>x</sub> thin films. <b>2000</b> , 168, 48-51	
1695	Structure, chemical bonding and electrochemical behavior of heteroatom-substituted carbons prepared by arc discharge and chemical vapor deposition. <b>2000</b> , 2, 17-29	11
1694	A new class of ultra-hard materials based on AlMgB <sub>14</sub> . <b>2000</b> , 42, 597-602	137
1693	Investigation of the thermal stability of nitrogen-rich amorphous carbon nitride films. <b>2000</b> , 377-378, 148-155	22
1692	Hydrogen-containing carbon nitride films produced by the combined hot filament-plasma CVD technique. <b>2000</b> , 377-378, 280-284	7
1691	Studies on the structure and bonding state of nitric amorphous carbon (a-CN <sub>x</sub> ) films by reactive rf magnetron sputtering. <b>2000</b> , 377-378, 320-325	11
1690	Indentation and scratch tests on sputtered amorphous CN <sub>x</sub> films deposited on plasma-nitrided Ti-6Al-4V. <b>2000</b> , 9, 499-505	1
1689	Surface engineering with light alloys-Hard coatings, thin films, and plasma nitriding. <b>2000</b> , 9, 302-305	12
1688	Synthesis and characterization of C <sub>3</sub> N <sub>4</sub> hard films. <b>2000</b> , 43, 185-198	8
1687	Nanostructured Superhard Materials. 104-139	21
1686	The high pressure synthesis of the graphitic form of C <sub>3</sub> N <sub>4</sub> . <b>2000</b> , 18, 213-219	6
1685	Growth of SiCN films by magnetron sputtering. <b>2000</b> , 16, 225-228	6
1684	Preparation of fluorinated amorphous carbon nitride films by magnetron sputtering. <b>2000</b> , 16, 229-233	2
1683	Electron field emission from amorphous carbon nitride synthesized by electron cyclotron resonance plasma. <b>2000</b> , 18, 1840	24
1682	Internal stress of amorphous carbon nitride films. <b>2000</b> , 18, 1773	14

1681	X-Ray Photoelectron Spectroscopic Observation on the Formation of Carbon Nitride Thin Films Produced by Low-Energy Nitrogen Ion Implantation. <b>2000</b> , 39, 4540-4544	8
1680	Enhanced dissociation and ionization of N <sub>2</sub> in a pulsed discharge by adding NH <sub>3</sub> or CH <sub>4</sub> into nitrogen gas. <b>2000</b> , 33, 3223-3227	16
1679	Thermal Analysis on the Amorphous Carbon Nitride Prepared by Reactive Magnetron Sputtering. <b>2000</b> , 39, L420-L422	4
1678	Crystalline carbon nitride thin films deposited by microwave plasma chemical vapor deposition. <b>2000</b> , 9, 545-549	
1677	A New Method for Thin Film Deposition Based Microwave Electron Cyclotron Resonance Plasma Sources Enhanced Direct-Current Magnetron Sputtering. <b>2000</b> , 17, 586-588	6
1676	High-pressure phases and structural bonding of Ge <sub>3</sub> N <sub>4</sub> . <b>2000</b> , 62, 5-8	32
1675	Spectroscopy of C bonding in hard graphitic carbon nitride films: Superstructure of basal planes and hardening mechanisms. <b>2000</b> , 62, 4261-4264	61
1674	Vibrational analysis of amorphous carbon-nitrogen alloys by <sup>15</sup> N and D isotopic substitution. <b>2000</b> , 61, 1083-1087	41
1673	Shock-induced transformation of β-Si <sub>3</sub> N <sub>4</sub> to a high-pressure cubic-spinel phase. <b>2000</b> , 76, 3706-3708	134
1672	Carbon nitride thin film synthesized on iron buffer layers. <b>2000</b> , 88, 7095-7098	8
1671	Semi-empirical modeling of the optical gap of amorphous hydrogenated nitrogenated carbon films. <b>2000</b> , 18, 2466	2
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1669	Effects of increasing nitrogen concentration on the structure of carbon nitride films deposited by ion beam assisted deposition. <b>2000</b> , 18, 2277	48
1668	Chemical shift resolved photoionization cross sections of amorphous carbon nitride. <b>2000</b> , 85, 2132-5	21
1667	Effect of temperature on carbon nitride films synthesized by ion-beam-assisted pulsed laser deposition. <b>2000</b> , 88, 7060-7066	21
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1665	Statistical models for carbon-nitrogen film growth. <b>2000</b> , 61, 3417-25	12
1664	Possible production of C <sub>3</sub> N <sub>4</sub> in the microwave-discharge plasma of C <sub>2</sub> H <sub>2</sub> /N <sub>2</sub> . <b>2000</b> , 88, 5592-5596	8

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1661	Influence of nitrogen and temperature on the deposition of tetrahedrally bonded amorphous carbon. <b>2000</b> , 88, 1149-1157	115
1660	Subnanometer scale tribological properties of nitrogen containing carbon coatings used in magnetic storage devices. <b>2000</b> , 18, 2023-2026	36
1659	Investigation of hardness in tetrahedrally bonded nonmolecular CO <sub>2</sub> solids by density-functional theory. <b>2000</b> , 62, 14685-14689	54
1658	Evidence for the existence of nitrogen-substituted graphite structure by polarization dependence of near-edge x-ray-absorption fine structure. <b>2000</b> , 62, R6053-R6056	101
1657	GROWTH, CHARACTERIZATION, AND PROPERTIES OF CARBON NITRIDE WITH AND WITHOUT SILICON ADDITION. <b>2000</b> , 14, 333-348	15
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1655	Deposition mechanisms and properties of oxygenated carbon nitride films from rf discharges of acetylene, nitrogen, oxygen and argon mixtures. <b>2000</b> , 262, 216-227	8
1654	Electronic and structural properties of amorphous carbon-nitrogen alloys. <b>2000</b> , 266-269, 808-814	13
1653	Structural modifications of hydrogenated amorphous carbon nitride due to ultraviolet light irradiation and thermal annealing. <b>2000</b> , 266-269, 815-820	5
1652	Powder Synthesis and Characterization of Amorphous Carbon Nitride. <b>2000</b> , 12, 3264-3270	522
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1650	Effect of carbon nitride bonding structure on electron field emission. <b>2000</b> , 9, 1228-1232	20
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1648	New superhard phases for three-dimensional C <sub>60</sub> -based fullerenes. <b>2000</b> , 85, 2328-31	82
1647	Influence of plasma parameters on the growth and properties of magnetron sputtered CN <sub>x</sub> thin films. <b>2000</b> , 88, 524-532	68
1646	Characterization of a Carbon-Nitrogen Network Solid with NMR and High Field EPR. <b>2000</b> , 104, 9817-9822	18

1645	Raman spectroscopy measurements of DC-magnetron sputtered carbon nitride (a-C:N) thin films for magnetic hard disk coatings. <b>2000</b> , 9, 1500-1505	59
1644	Deposition of carbon nitride films by filtered cathodic vacuum arc combined with radio frequency ion beam source. <b>2000</b> , 9, 2010-2018	20
1643	X-Ray photoelectron spectroscopy reference data for identification of the C <sub>3</sub> N <sub>4</sub> phase in carbon-nitrogen films. <b>2000</b> , 9, 1904-1907	369
1642	Amorphous carbon and carbon nitride films synthesized by electrolysis of nitrogen-containing liquid. <b>2000</b> , 9, 1307-1311	12
1641	Bonding and morphology study of carbon nitride films obtained by dual ion beam sputtering. <b>2000</b> , 18, 515-523	25
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1639	High pressures: Recent trends in materials science. <b>2000</b> , 18, 203-212	5
1638	Preparation of CNSi <sub>x</sub> using a RF hollow cathode. <b>2000</b> , 9, 530-533	3
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1636	Study of the thermal stability of carbon nitride thin films prepared by reactive magnetron sputtering. <b>2000</b> , 9, 212-218	36
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1634	Stability of carbon nitride films prepared from volatile CN species via atomic transport reactions. <b>2000</b> , 9, 539-543	10
1633	Nitridation of a diamond film using 300-700 eV N <sub>2</sub> ion beams. <b>2000</b> , 9, 698-702	5
1632	Deposition of carbon nitride films using an electron cyclotron wave resonance plasma source. <b>2000</b> , 9, 524-529	40
1631	X-ray photoelectron spectroscopy characterization of CN <sub>x</sub> thin films deposited by electron beam evaporation and nitrogen ion bombardment. <b>2000</b> , 9, 562-565	7
1630	Microstructure analysis of CN-based nanocage materials by high-resolution electron microscopy. <b>2000</b> , 9, 906-910	10
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1628	The Theory of Real Materials. <b>2000</b> , 30, 1-26	44

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1626	Identification of Electron Donor States in N-Doped Carbon Nanotubes. <b>2001</b> , 1, 457-460	659
1625	High-pressure bulk synthesis of crystalline C <sub>6</sub> N <sub>9</sub> H <sub>3</sub> .HCl: a novel c(3)n(4) graphitic derivative. <b>2001</b> , 123, 7788-96	225
1624	Nanostructured Tungsten-Based Composite Coatings and Their Applications. <b>2001</b> , 1, 183-187	3
1623	Influence of nitrogen ion energy on the Raman spectroscopy of carbon nitride films. <b>2001</b> , 10, 2137-2144	20
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1621	A study on the bonding structure and mechanical properties of magnetron sputtered CN <sub>x</sub> thin films. <b>2001</b> , 10, 1179-1184	22
1620	The structure and tribological property of amorphous carbon and carbon nitride films prepared by ECR plasma sputtering method. <b>2001</b> , 10, 1093-1097	22
1619	Carbon nitride thin-films deposited from coupled r.f.-magnetron sputtering and ion beam-assisted processes. <b>2001</b> , 10, 1175-1178	9
1618	Mechanical properties and characterisation of very thin CN <sub>x</sub> films synthesised by IBAD. <b>2001</b> , 10, 2199-2211	24
1617	Synthesis of Spherical Carbon Nitride Nanostructures. <b>2001</b> , 1, 731-734	212
1616	Nanospace due to the presence of boron and nitrogen in carbon films prepared from polyimide. <b>2001</b> , 125, 189-196	21
1615	Nanocrystalline Si <sub>3</sub> N <sub>4</sub> with Si <sub>3</sub> N <sub>4</sub> shell structure. <b>2001</b> , 49, 318-323	11
1614	First-principles characterisation of new ternary heterodiamond BC <sub>2</sub> N phases. <b>2001</b> , 20, 107-119	64
1613	The characterization of amorphous carbon nitride films grown by RFCVD method. <b>2001</b> , 283, 95-100	3
1612	XPS study of nitridation of diamond and graphite with a nitrogen ion beam. <b>2001</b> , 492, 315-328	71
1611	Electron emission enhanced chemical vapor deposition (EEECVD) for the fabrication of diverse silicon-containing films. <b>2001</b> , 398-399, 591-596	3
1610	Structures and properties of the SiNC films on Si wafer at different deposition stages. <b>2001</b> , 398-399, 413-418	11



1609	Influence of chemical sputtering on the composition and bonding structure of carbon nitride films. <b>2001</b> , 398-399, 116-123	44
1608	Gas-phase and plasma-surface reactions in radiofrequency discharges of C <sub>2</sub> H <sub>2</sub> /N <sub>2</sub> noble gas mixtures. <b>2001</b> , 398-399, 156-162	4
1607	Dual ion plasma-beam sources used to maximise sp <sup>3</sup> C-N bonds in carbon nitride. <b>2001</b> , 10, 1125-1131	5
1606	Comparative study of microstructure in a-C <sub>x</sub> N <sub>1-x</sub> films deposited by radiofrequency magnetron sputtering. <b>2001</b> , 10, 1156-1159	4
1605	XPS studies of amorphous SiCN thin films prepared by nitrogen ion-assisted pulsed-laser deposition of SiC target. <b>2001</b> , 10, 1921-1926	66
1604	Correlation of Bulk Modulus and the Constituent Element Properties of Binary Intermetallic Compounds. <b>2001</b> , 13, 4642-4648	62
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1602	Mechanosynthesis of carbon nitride compounds. <b>2001</b> , 10, 1995-2001	9
1601	X-Ray absorption studies of bonding environments in graphitic carbon nitride. <b>2001</b> , 10, 1170-1174	28
1600	Synthesis of amorphous carbon nitride using reactive ion beam sputtering deposition with grazing bombardment. <b>2001</b> , 10, 2184-2189	10
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1598	Irradiation effect of low energy nitrogen-ion beam during pulsed laser deposition process on the structural and bonding properties of carbon nitride thin films. <b>2001</b> , 89, 1580	16
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1596	Chemical sputtering of ta-C: Implications for the deposition of carbon nitride. <b>2001</b> , 89, 5754-5759	28
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1594	Structure and elastic properties of amorphous silicon carbon nitride films. <b>2001</b> , 64,	50
1593	Theoretical study of a body-centered-tetragonal phase of carbon nitride. <b>2001</b> , 64,	14
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1591	Hardening Mechanisms in Graphitic Carbon Nitride Films Grown with N <sub>2</sub> /Ar Ion Assistance. <b>2001</b> , 13, 129-135	32
1590	Effects of Ion Bombarding and Nitrogenation on the Properties of Photovoltaic a-CN <sub>x</sub> Thin Films. <b>2001</b> , 692, 1	
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1586	Defects and defective ultra-hard materials. <b>2001</b> , 156, 181-189	
1585	Progress in carbon nitride synthesis by pulsed-laser deposition. <b>2001</b> ,	
1584	Monitoring the structural and chemical properties of CN <sub>x</sub> thin films during in situ annealing in a TEM. <b>2001</b> , 13, 97-105	9
1583	The preparation and characterization of amorphous SiCN thin films. <b>2001</b> , 6, 665-669	4
1582	Composition and chemical structure characteristics of CN layers prepared by different plasma assisted techniques. <b>2001</b> , 141-142, 63-69	10
1581	Study of electronic structure of graphite-like carbon nitride. <b>2001</b> , 114-116, 841-848	46
1580	Microstructural properties of amorphous carbon nitride films synthesised by dc magnetron sputtering. <b>2001</b> , 175-176, 525-530	22
1579	The effect of postdeposition annealing on chemical bonding in amorphous carbon nitride films prepared by dc magnetron sputtering. <b>2001</b> , 181, 331-338	12
1578	Hardness measurements on thin IBAD CN <sub>x</sub> films – a comparative study. <b>2001</b> , 137, 197-204	16
1577	Synthesis of carbon nitride films by high-density helicon wave-excited plasma sputtering. <b>2001</b> , 142-144, 874-880	7
1576	The effect of d.c. substrate bias on the properties of nitrogen-rich CN <sub>x</sub> films. <b>2001</b> , 142-144, 688-692	4
1575	Nanoindentation studies on amorphous carbon nitride thin films prepared by shielded arc ion plating. <b>2001</b> , 142-144, 719-723	9
1574	Ion-beam-assisted deposition of CN <sub>x</sub> films. <b>2001</b> , 145, 71-74	5

1573	Raman spectral study on the carbon nitride film synthesized on a nitridated diamond surface by nitrogen-arc-discharge-assisted laser ablation deposition. <b>2001</b> , 382, 34-38	7
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1569	Properties of carbon nitride films deposited with and without electron cyclotron resonance plasma assistance. <b>2001</b> , 382, 4-12	4
1568	Synthesis and structural properties of Al <sub>2</sub> C <sub>2</sub> N <sub>2</sub> O composite thin films. <b>2001</b> , 385, 55-60	12
1567	Correlation between hardness and structure of carbon-nitride thin films obtained by reactive pulsed laser deposition. <b>2001</b> , 388, 93-100	16
1566	Analysis of X-ray photoelectron spectra of amorphous carbon nitride films. <b>2001</b> , 388, 114-119	7
1565	Effect of nitrogen addition on the elastic and structural properties of amorphous carbon thin films. <b>2001</b> , 389, 315-320	15
1564	Effects of heat treatment on structure of amorphous CN <sub>x</sub> thin films by pulsed laser deposition. <b>2001</b> , 389, 62-67	21
1563	Characterization of CN <sub>x</sub> films prepared by twinned ECR plasma source enhanced DC magnetron sputtering. <b>2001</b> , 390, 107-112	31
1562	Fabrication of amorphous carbon nitride films by hot-wire chemical vapor deposition. <b>2001</b> , 395, 249-252	9
1561	Effect of target self-bias on carbon nitride thin films deposited by RF magnetron sputtering. <b>2001</b> , 118, 179-182	20
1560	Structure and optical properties of carbon nitride films deposited by magnetron sputtering. <b>2001</b> , 120, 337-342	35
1559	Bonding structure analysis of carbon nitride films by Raman spectroscopy and X-ray photoelectron spectroscopy (XPS). <b>2001</b> , 70, 239-246	11
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1555	Effect of silicon impurity on carbon nitride films prepared by microwave plasma chemical vapor deposition. <b>2001</b> , 85, 38-42	9
1554	Ab initio search of carbon nitrides, isoelectronic with diamond, likely to lead to new ultra hard materials. <b>2001</b> , 4, 255-272	5
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1552	Morphology and field emission properties of nano-structured nitrogenated carbon films produced by plasma enhanced hot filament CVD. <b>2001</b> , 39, 1723-1730	18
1551	A theoretical study of HN <sub>3</sub> reaction with the C(1 0 0)-2 $\bar{1}$ surface. <b>2001</b> , 343, 212-218	15
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1549	Characterization of the density, structure and chemical states of carbon nitride films. <b>2001</b> , 175-176, 456-461	18
1548	Influence of deposition pressure on the composition and structure of carbon nitride films deposited by direct current plasma assisted pulsed laser ablation. <b>2001</b> , 182, 32-39	17
1547	The effect of nitrogen on the chemistry of sputter-deposited SiC <sub>x</sub> N <sub>y</sub> films. <b>2001</b> , 183, 270-277	10
1546	Optical properties of amorphous carbon nitride synthesized on Si by ECR-CVD. <b>2001</b> , 135, 184-187	18
1545	Surface nitriding of graphite substrate by plasma focus device towards synthesis of carbon nitride coating. <b>2001</b> , 145, 8-15	53
1544	Stability of tetragonal crystalline carbon nitrides: the nitrogen content dependence. <b>2001</b> , 282, 415-420	2
1543	Cubic-C <sub>3</sub> N <sub>4</sub> nanoparticles synthesized in CN <sub>x</sub> /TiN <sub>x</sub> multilayer films. <b>2001</b> , 334, 7-11	25
1542	Surface modifications in diamond-like carbon films submitted to low-energy nitrogen ion bombardment. <b>2001</b> , 175-177, 699-704	3
1541	A SIMS study on positive and negative ions sputtered from graphite by mass-separated low energy Ne <sup>+</sup> , N <sub>2</sub> <sup>+</sup> and N <sup>+</sup> ions. <b>2001</b> , 183, 260-270	10
1540	Influence of ions energy on the bonding structure of amorphous carbon nitride films. <b>2001</b> , 70, 245-248	4
1539	Bonding structure of CN <sub>x</sub> films synthesized by nitrogen implantation into diamond films. <b>2001</b> , 72, 93-96	3
1538	Growth competition between crystalline silicon carbon nitrides and silicon nitrides deposited on Si wafer by MPCVD. <b>2001</b> , 72, 245-250	12

1537	Synthesizing crystalline carbon nitrides by using two different bio-molecular materials. <b>2001</b> , 72, 251-257	8
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1535	Low-energy carbon and nitrogen ion implantation in silicon. <b>2001</b> , 19, 1124	4
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1531	Near-Edge X-ray Absorption Spectra of Carbon-Nitride Molecules and Solids. <b>2001</b> , 63, 70-86	16
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1529	Influence of nitrogen on the structure and nanomechanical properties of pulsed laser deposited tetrahedral amorphous carbon. <b>2001</b> , 13, 2971-2987	39
1528	Preparation and Characterization of C <sub>1.5</sub> N <sub>1.5</sub> Thin Film by Ion Beam Evaporation. <b>2001</b> , 40, 1045-1048	
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