

Yogesh K Vohra

List of Publications by Year in descending order

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264
papers

9,067
citations

44444

50
h-index

60403

85
g-index

266
all docs

266
docs citations

266
times ranked

8787
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic structure of antiferromagnetic high-pressure phases of dysprosium. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 545, 168749.	1.0	4
2	Strength of tantalum to 276â€‰GPa determined by two x-ray diffraction techniques using diamond anvil cells. <i>Journal of Applied Physics</i> , 2022, 131, 015905.	1.1	2
3	Experimental and Computational Studies of Compression and Deformation Behavior of Hafnium Diboride to 208 GPa. <i>Materials</i> , 2022, 15, 2762.	1.3	2
4	Drastic enhancement of magnetic critical temperature and amorphization in topological magnet EuSn ₂ P ₂ under pressure. <i>Npj Quantum Materials</i> , 2022, 7, .	1.8	9
5	High-Entropy Borides under Extreme Environment of Pressures and Temperatures. <i>Materials</i> , 2022, 15, 3239.	1.3	7
6	Discovering Superhard Bâ€‰Nâ€‰O Compounds by Iterative Machine Learning and Evolutionary Structure Predictions. <i>ACS Omega</i> , 2022, 7, 21035-21042.	1.6	5
7	Pressure-induced structural transition and huge enhancement of superconducting properties of single-crystal Fe _{0.99} Ni _{0.01} Se _{0.5} Te _{0.5} unconventional superconductor. <i>Journal of Materials Research</i> , 2021, 36, 1624-1636.	1.2	1
8	High-pressure high-temperature synthesis and thermal equation of state of high-entropy transition metal boride. <i>AIP Advances</i> , 2021, 11, .	0.6	11
9	Selective Deposition of Hard Boron-Carbon Microstructures on Silicon. <i>Materials</i> , 2021, 14, 1397.	1.3	0
10	Microscopic phase diagram of Eu(Fe _{1-x} Ni _x)As ₂ (x = 0,0.04) under pressure. <i>Physical Review B</i> , 2021, 103, .	1.1	5
11	Shear strength measurements and hydrostatic compression of rhenium diboride under high pressures. <i>Journal of Applied Physics</i> , 2021, 129, 205901.	1.1	4
12	Machine learning and evolutionary prediction of superhard B-C-N compounds. <i>Npj Computational Materials</i> , 2021, 7, .	3.5	34
13	Theoretical and experimental studies of compression and shear deformation behavior of Osmium to 280 GPa. <i>Engineering Research Express</i> , 2021, 3, 045017.	0.8	0
14	Experimental and theoretical P-V-T equation of state for Os ₂ B ₃ . <i>High Pressure Research</i> , 2021, 41, 27-38.	0.4	1
15	Static compression of rare earth metal holmium to 282â€‰GPa. <i>High Pressure Research</i> , 2020, 40, 392-401.	0.4	5
16	Dusty-Plasma-Assisted Synthesis of Silica Nanoparticles for in Situ Surface Modification of 3D-Printed Polymer Scaffolds. <i>ACS Applied Nano Materials</i> , 2020, 3, 7392-7396.	2.4	11
17	Room-temperature compression and equation of state of body-centered cubic zirconium. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 12LT02.	0.7	9
18	First-Principles Predictions and Synthesis of B ₅ O ₂ by Chemical Vapor Deposition. <i>Scientific Reports</i> , 2020, 10, 4454.	1.6	8

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19	Non-equilibrium organosilane plasma polymerization for modulating the surface of PTFE towards potential blood contact applications. <i>Journal of Materials Chemistry B</i> , 2020, 8, 2814-2825.	2.9	16
20	Neutron diffraction study of magnetic ordering in high pressure phases of rare earth metal holmium. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 507, 166843.	1.0	8
21	Experimental and Computational Studies on Superhard Material Rhenium Diboride under Ultrahigh Pressures. <i>Materials</i> , 2020, 13, 1657.	1.3	15
22	Electronic structure and anisotropic compression of Os ₂ B ₃ to 358 GPa. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 405703.	0.7	9
23	Ultrahigh pressure equation of state of tantalum to 310 GPa. <i>High Pressure Research</i> , 2019, 39, 489-498.	0.4	10
24	Non-equilibrium hybrid organic plasma processing for superhydrophobic PTFE surface towards potential bio-interface applications. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 183, 110463.	2.5	16
25	Magnetic ordering in rare earth metal dysprosium revealed by neutron diffraction studies in a large-volume diamond anvil cell. <i>High Pressure Research</i> , 2019, 39, 588-597.	0.4	8
26	Observation of two collapsed phases in CaRbF_4 . <i>Physical Review B</i> , 2019, 100, .	1.1	9
27	Novel magneto-plasma processing for enhanced modification of electrospun biomaterials. <i>Materials Letters</i> , 2019, 250, 96-98.	1.3	5
28	Lattice disorder effect on magnetic ordering of iron arsenides. <i>Scientific Reports</i> , 2019, 9, 20147.	1.6	0
29	Rapid Growth of Nanocrystalline Diamond on Single Crystal Diamond for Studies on Materials under Extreme Conditions. <i>Scientific Reports</i> , 2018, 8, 1402.	1.6	13
30	Atmospheric pressure plasma jet: A facile method to modify the intimal surface of polymeric tubular conduits. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018, 36, .	0.9	15
31	Superconducting and magnetic phase diagram of RbEuFe_4 and CsEuFe_4 at high pressure. <i>Physical Review B</i> , 2018, 98, .	1.1	31
32	Pressure Induced Densification and Compression in a Reprocessed Borosilicate Glass. <i>Materials</i> , 2018, 11, 114.	1.3	0
33	Computational Predictions and Microwave Plasma Synthesis of Superhard Boron-Carbon Materials. <i>Materials</i> , 2018, 11, 1279.	1.3	9
34	High pressure high temperature devitrification of Fe ₇₈ B ₁₃ Si ₉ metallic glass with simultaneous x-ray structural characterization. <i>Journal of Applied Physics</i> , 2018, 123, 215901.	1.1	0
35	Volume collapse phase transitions in cerium-praseodymium alloys under high pressure. <i>High Pressure Research</i> , 2018, 38, 270-280.	0.4	1
36	Magnetic transition temperatures follow crystallographic symmetry in samarium under high-pressures and low-temperatures. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 065801.	0.7	5

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37	White-beam X-ray diffraction and radiography studies on high-boron-containing borosilicate glass at high pressures. High Pressure Research, 2017, 37, 233-243.	0.4	2
38	High-pressure structural parameters and equation of state of osmium to 207ÅGPa. Cogent Physics, 2017, 4, 1376899.	0.7	13
39	Near-zero thermal expansion in magnetically ordered state in dysprosium at high pressures and low temperatures. Cogent Physics, 2017, 4, 1412107.	0.7	4
40	Morphological Transition in Diamond Thin-Films Induced by Boron in a Microwave Plasma Deposition Process. Materials, 2017, 10, 1305.	1.3	5
41	Magnetic and Structural Phase Transitions in Thulium under High Pressures and Low Temperatures. Journal of Physics: Conference Series, 2017, 950, 042026.	0.3	1
42	Nanocrystalline diamond micro-anvil grown on single crystal diamond as a generator of ultra-high pressures. AIP Advances, 2016, 6, 095027.	0.6	5
43	High pressure structural study of samarium doped CeO ₂ oxygen vacancy conductor " Insight into the dopant concentration relationship to the strain effect in thin film ionic conductors. Solid State Ionics, 2016, 292, 59-65.	1.3	4
44	Superconducting $B_{i_2}Te$ Pressure-induced universality in the		

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55	High pressure studies using two-stage diamond micro-anvils grown by chemical vapor deposition. High Pressure Research, 2015, 35, 282-288.	0.4	12
56	High Pressure Temperature Phase Diagram of 1,1-Diamino-2,2-dinitroethylene (FOX-7). Journal of Physical Chemistry A, 2015, 119, 9739-9747.	1.1	32
57	Structural and magnetic phase transitions in gadolinium under high pressures and low temperatures. High Pressure Research, 2014, 34, 385-391.	0.4	16
58	Rapid Growth of Nanostructured Diamond Film on Silicon and TiAl ₄ Alloy Substrates. Materials, 2014, 7, 365-374.	1.3	6
59	High pressure effects on the superconductivity in rare-earth-doped CaFe ₂ As ₂ . High Pressure Research, 2014, 34, 49-58.	0.4	4
60	Magnetic ordering temperatures in rare earth metal dysprosium under ultrahigh pressures. High Pressure Research, 2014, 34, 266-272.	0.4	14
61	Pressure-induced superconductivity and structural transitions in Ba(Fe _{0.9} Ru _{0.1}) ₂ As ₂ . European Physical Journal B, 2014, 87, 1.	0.6	1
62	Polymorphism in Paracetamol: Evidence of Additional Forms IV and V at High Pressure. Journal of Physical Chemistry A, 2014, 118, 6068-6077.	1.1	31
63	Neutron diffraction and electrical transport studies on magnetic ordering in terbium at high pressures and low temperatures. High Pressure Research, 2013, 33, 555-562.	0.4	11
64	Synthesis and Characterization of Boron-Doped Single Crystal Diamond. Materials Research Society Symposia Proceedings, 2013, 1519, 1.	0.1	6
65	Nano-TiO ₂ particles impair adhesion of airway epithelial cells to fibronectin. Respiratory Physiology and Neurobiology, 2013, 185, 454-460.	0.7	7
66	High Pressure Low Temperature Studies on 1-2-2 Iron-based Superconductors Using Designer Diamond Cells. Materials Research Society Symposia Proceedings, 2013, 1582, 1.	0.1	0
67	Structural Properties of Lanthanides at Ultra High Pressure. Fundamental Theories of Physics, 2013, , 275-319.	0.1	20
68	Magnetic transitions in erbium at high pressures. Journal of Applied Physics, 2012, 111, .	1.1	2
69	Magnetic properties of single crystal EuCo ₂ As ₂ . Journal of Applied Physics, 2012, 111, .	1.1	25
70	1,1-diamino-2,2-dinitroethylene under high pressure-temperature. Journal of Chemical Physics, 2012, 137, 174304.	1.2	35
71	Structural phase transitions in yttrium under ultrahigh pressures. Journal of Physics Condensed Matter, 2012, 24, 362201.	0.7	32
72	Neutron diffraction and electrical transport studies on the incommensurate magnetic phase transition in holmium at high pressures. Journal of Physics Condensed Matter, 2012, 24, 216003.	0.7	3

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73	Simultaneous measurement of pressure evolution of crystal structure and superconductivity in FeSe _{0.92} using designer diamonds. <i>Europhysics Letters</i> , 2012, 99, 26002.	0.7	10
74	Pressure-induced superconductivity in Ba _{0.5} Sr _{0.5} Fe ₂ As ₂ . <i>Journal of Physics Condensed Matter</i> , 2012, 24, 495702.	0.7	2
75	In vitro studies on the effect of particle size on macrophage responses to nanodiamond wear debris. <i>Acta Biomaterialia</i> , 2012, 8, 1939-1947.	4.1	88
76	Recent advances in the development of GTR/GBR membranes for periodontal regeneration—A materials perspective. <i>Dental Materials</i> , 2012, 28, 703-721.	1.6	555
77	Spatially Designed Nanofibrous Membranes for Periodontal Tissue Regeneration. , 2012, , 141-168.		0
78	Compression of bulk metallic glass Zr ₅₇ Cu _{15.4} Ni _{12.6} Al ₁₀ Nb ₅ to 122 GPa. <i>High Pressure Research</i> , 2011, 31, 287-291.	0.4	1
79	Phase transition and superconductivity of SrFe ₂ As ₂ under high pressure. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 122201.	0.7	45
80	Conducting boron-doped single-crystal diamond films for high pressure research. <i>High Pressure Research</i> , 2011, 31, 388-398.	0.4	2
81	Improved adhesion of ultra-hard carbon films on cobalt–chromium orthopaedic implant alloy. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 307-316.	1.7	28
82	Engineering an antiplatelet adhesion layer on an electrospun scaffold using porcine endothelial progenitor cells. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 97A, 145-151.	2.1	26
83	Biodegradable polyurethanes: Comparative study of electrospun scaffolds and films. <i>Journal of Applied Polymer Science</i> , 2011, 121, 3292-3299.	1.3	17
84	Electrospinning of Biosyn [®] -based tubular conduits: Structural, morphological, and mechanical characterizations. <i>Acta Biomaterialia</i> , 2011, 7, 2070-2079.	4.1	28
85	High pressure phase transitions in the rare earth metal erbium to 151 GPa. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 315701.	0.7	19
86	High-pressure phase transitions in rare earth metal thulium to 195 GPa. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 155701.	0.7	14
87	Magnetic and structural phase transitions in erbium at low temperatures and high pressures. <i>Physical Review B</i> , 2011, 84, .	1.1	6
88	Structural phase transitions in EuFe ₂ As ₂ superconductor at low temperatures and high pressures. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 365703.	0.7	15
89	Synthesis and Characterization of Multilayered Diamond Coatings for Biomedical Implants. <i>Materials</i> , 2011, 4, 857-868.	1.3	52
90	Mesenchymal Stem Cell Responses to Bone-Mimetic Electrospun Matrices Composed of Polycaprolactone, Collagen I and Nanoparticulate Hydroxyapatite. <i>PLoS ONE</i> , 2011, 6, e16813.	1.1	86

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91	In vitro dissolution and mechanical behavior of c-axis preferentially oriented hydroxyapatite thin films fabricated by pulsed laser deposition. <i>Acta Biomaterialia</i> , 2010, 6, 3234-3241.	4.1	70
92	Two ply tubular scaffolds comprised of proteins/poliglecaprone/polycaprolactone fibers. <i>Journal of Materials Science: Materials in Medicine</i> , 2010, 21, 541-549.	1.7	37
93	An in vitro regenerated functional human endothelium on a nanofibrous electrospun scaffold. <i>Biomaterials</i> , 2010, 31, 4376-4381.	5.7	85
94	<i>In situ</i> electrical conductivity and Raman study of C ₆₀ tetragonal polymer at high pressures up to 30 GPa. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 3068-3071.	0.7	6
95	Low temperature amorphization and superconductivity in FeSe single crystals at high pressures. <i>Journal of Materials Research</i> , 2010, 25, 396-400.	1.2	8
96	Anomalous compressibility effects and superconductivity of EuFe ₂ As ₂ under high pressures. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 292202.	0.7	73
97	Structural and magnetic phase transitions in NdCoAsO under high pressures. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 185702.	0.7	6
98	Formation of collapsed tetragonal phase in EuCo ₂ As ₂ under high pressure. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 425701.	0.7	28
99	Collapsed tetragonal phase and superconductivity of $BaFe_2As_2$ under high pressure. <i>Physical Review B</i> , 2010, 82, ..	1.1	68
100	Structural stability and compressibility of group IV transition metals-based bulk metallic glasses under high pressure. <i>Journal of Applied Physics</i> , 2009, 106, 046101.	1.1	2
101	Multivariable study on homoepitaxial diamond growth using isotopically enriched carbon-13 gas mixtures. <i>Journal of Materials Research</i> , 2009, 24, 493-498.	1.2	1
102	<i>In vitro</i> biodegradation of designed tubular scaffolds of electrospun protein/polyglyconate blend fibers. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2009, 89B, 135-147.	1.6	44
103	A biomimetic tubular scaffold with spatially designed nanofibers of protein/PDS [®] bio-blends. <i>Biotechnology and Bioengineering</i> , 2009, 104, 1025-1033.	1.7	78
104	Electrospinning of novel biodegradable poly(ester urethane)s and poly(ester urethane urea)s for soft tissue-engineering applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2009, 20, 2129-2137.	1.7	51
105	High pressure superconductivity in iron-based layered compounds studied using designer diamonds. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 232201.	0.7	36
106	Rapid dissolution of shells of weakly calcified Antarctic benthic macroorganisms indicates high vulnerability to ocean acidification. <i>Antarctic Science</i> , 2009, 21, 449-456.	0.5	119
107	Pressure-induced reversible amorphization in superconducting compound FeSe _{0.5} Te _{0.5} . <i>High Pressure Research</i> , 2009, 29, 267-271.	0.4	11
108	Mesenchymal stem cell interaction with ultra-smooth nanostructured diamond for wear-resistant orthopaedic implants. <i>Biomaterials</i> , 2008, 29, 3461-3468.	5.7	78

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109	Preliminary tribological evaluation of nanostructured diamond coatings against ultra-high molecular weight polyethylene. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008, 85B, 140-148.	1.6	28
110	Synthesis and mechanical wear studies of ultra smooth nanostructured diamond (USND) coatings deposited by microwave plasma chemical vapor deposition with He/H ₂ /CH ₄ /N ₂ mixtures. <i>Diamond and Related Materials</i> , 2008, 17, 419-427.	1.8	30
111	Growth chemistry for the fabrication of designer diamonds for high pressure research. <i>High Pressure Research</i> , 2008, 28, 1-8.	0.4	4
112	High speed continuous and interrupted dry turning of A390 Aluminum/Silicon Alloy using nanostructured diamond coated WC-6 wt.% cobalt tool inserts by MPCVD. <i>Diamond and Related Materials</i> , 2008, 17, 2041-2047.	1.8	24
113	Modeling of nitrogen/diborane/methane/hydrogen plasma for nanocrystalline diamond growth: Comparison with experimental data. <i>Diamond and Related Materials</i> , 2008, 17, 2067-2070.	1.8	10
114	Adhesion of nanostructured diamond film on a copper-beryllium alloy. <i>Journal of Materials Research</i> , 2008, 23, 2373-2381.	1.2	6
115	High Pressure Phase Transformations in Heavy Rare Earth Metals and Connections to Actinide Crystal Structures. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1104, 1.	0.1	11
116	Symmetry lowering under high pressure: Structural evidence for f-shell delocalization in heavy rare earth metal terbium. <i>Physical Review B</i> , 2007, 76, .	1.1	32
117	Role of nitrogen in the homoepitaxial growth on diamond anvils by microwave plasma chemical vapor deposition. <i>Journal of Materials Research</i> , 2007, 22, 1112-1117.	1.2	3
118	Finite-element modeling of stresses and strains in a diamond anvil cell device: case of a diamond-coated rhenium gasket. <i>High Pressure Research</i> , 2007, 27, 321-331.	0.4	4
119	Functionally graded electrospun scaffolds with tunable mechanical properties for vascular tissue regeneration. <i>Biomedical Materials (Bristol)</i> , 2007, 2, 224-232.	1.7	99
120	Electrical conductivity of the lower mantle ferropericlase across the electronic spin transition. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	56
121	Accelerating aging of zirconia femoral head implants: Change of surface structure and mechanical properties. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007, 81B, 486-492.	1.6	31
122	Crystallographic texture in pulsed laser deposited hydroxyapatite bioceramic coatings. <i>Acta Materialia</i> , 2007, 55, 131-139.	3.8	42
123	Nanostructured Biocomposite Scaffolds Based on Collagen Coelectrospun with Nanohydroxyapatite. <i>Biomacromolecules</i> , 2007, 8, 631-637.	2.6	241
124	Physical and mechanical properties of C ₆₀ under high pressures and high temperatures. <i>High Pressure Research</i> , 2006, 26, 175-183.	0.4	13
125	Mechano-morphological studies of aligned nanofibrous scaffolds of polycaprolactone fabricated by electrospinning. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2006, 17, 969-984.	1.9	169
126	Observation of complete regular trivalent rare earth sequence in heavy lanthanide metal holmium under high pressure. <i>High Pressure Research</i> , 2006, 26, 43-50.	0.4	12

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127	Effect of Surface Oxides and Intermetallics on Nanostructured Diamond Coating of Nitinol. Current Nanoscience, 2006, 2, 9-12.	0.7	5
128	Electrospun Bioactive Nanocomposite Scaffolds of Polycaprolactone and Nanohydroxyapatite for Bone Tissue Engineering. Journal of Nanoscience and Nanotechnology, 2006, 6, 487-493.	0.9	127
129	A Facile Method for Construction of Antifouling Surfaces by Self-Assembled Polymeric Monolayers of PEG-Silane Copolymers Formed in Aqueous Medium. Journal of Nanoscience and Nanotechnology, 2006, 6, 3507-3511.	0.9	14
130	Synthesis of ultrasmooth nanostructured diamond films by microwave plasma chemical vapor deposition using a He/H ₂ /CH ₄ /N ₂ gas mixture. Journal of Materials Research, 2006, 21, 2675-2682.	1.2	15
131	Calibration of an isotopically enriched carbon-13 layer pressure sensor to 156GPa in a diamond anvil cell. Journal of Applied Physics, 2006, 99, 064906.	1.1	9
132	Ultra-Smooth Nanostructured Diamond Films Deposited from He/H ₂ /CH ₄ /N ₂ Microwave Plasmas. Journal of Nanoscience and Nanotechnology, 2006, 6, 258-261.	0.9	14
133	Nanostructured Biomaterials for Regenerative Medicine. Current Nanoscience, 2006, 2, 155-177.	0.7	132
134	Nanoindentation on Porous Bioceramic Scaffolds for Bone Tissue Engineering. Journal of Nanoscience and Nanotechnology, 2005, 5, 1816-1820.	0.9	18
135	Low temperature growth of nanostructured diamond on quartz spheres. Journal Physics D: Applied Physics, 2005, 38, 1410-1414.	1.3	13
136	Crystal grain growth at the δ -uranium phase transformation in praseodymium. Physical Review B, 2005, 71, .	1.1	30
137	Simultaneous electrical and X-ray diffraction studies on neodymium metal to 152ÅGPa. High Pressure Research, 2005, 25, 137-144.	0.4	9
138	Analysis of anisotropic compression of uranium under high pressures: a computational and experimental overview. High Pressure Research, 2005, 25, 235-242.	0.4	5
139	Mesenchymal Stem Cell Adhesion and Spreading on Nanostructured Biomaterials. Journal of Nanoscience and Nanotechnology, 2004, 4, 986-989.	0.9	31
140	Electrical measurements on praseodymium metal to 179 GPa using designer diamond anvils. Applied Physics Letters, 2004, 84, 927-929.	1.5	29
141	Crystal structure and compressibility of FePt nanoparticles under high pressures and high temperatures. High Pressure Research, 2004, 24, 357-364.	0.4	1
142	Mechanical wear behavior of nanocrystalline and multilayer diamond coatings on temporomandibular joint implants. Journal of Materials Science: Materials in Medicine, 2004, 15, 773-777.	1.7	82
143	Distortion of alpha-uranium structure in praseodymium metal to 311ÅGPa. High Pressure Research, 2004, 24, 295-302.	0.4	44
144	Isotopically pure C13 layer as a stress sensor in a diamond anvil cell. Applied Physics Letters, 2004, 84, 5308-5310.	1.5	10

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145	Properties of nanocrystalline diamond thin films grown by MPCVD for biomedical implant purposes. <i>Diamond and Related Materials</i> , 2004, 13, 1740-1743.	1.8	43
146	Surface crystalline phases and nanoindentation hardness of explanted zirconia femoral heads. <i>Journal of Materials Science: Materials in Medicine</i> , 2003, 14, 863-867.	1.7	75
147	Structural and mechanical properties of nanostructured metalloceramic coatings on cobalt chrome alloys. <i>Applied Physics Letters</i> , 2003, 82, 1625-1627.	1.5	17
148	Isotopically enriched designer-diamond anvil. <i>Applied Physics Letters</i> , 2003, 83, 1734-1736.	1.5	7
149	Crystallographic Anisotropy in Compression of Uranium Metal to 100 GPa. <i>Materials Research Society Symposia Proceedings</i> , 2003, 802, 27.	0.1	1
150	Bioceramic hydroxyapatite at high pressures. <i>Applied Physics Letters</i> , 2003, 82, 4271-4273.	1.5	17
151	Effect of Surface Treatments on the Structural and Mechanical Properties of Nanostructured Diamond Coatings on Tungsten Carbide Cutting Tools. <i>Materials Research Society Symposia Proceedings</i> , 2003, 791, 322.	0.1	1
152	Mechanical Properties of Boron Doped Diamond Films Prepared by MPCVD. <i>Materials Research Society Symposia Proceedings</i> , 2003, 791, 293.	0.1	2
153	Effect of nitrogen addition on the morphology and structure of boron-doped nanostructured diamond films. <i>Applied Physics Letters</i> , 2003, 83, 5047-5049.	1.5	13
154	Structure and Mechanical Properties of Functionally-Graded Nanostructured Metalloceramic Coatings. <i>Materials Research Society Symposia Proceedings</i> , 2003, 778, 781.	0.1	1
155	X-ray diffraction and nanoindentation studies of nanocrystalline graphite at high pressures. <i>Applied Physics Letters</i> , 2002, 81, 2073-2075.	1.5	30
156	Nanostructured diamond film deposition on curved surfaces of metallic temporomandibular joint implant. <i>Journal Physics D: Applied Physics</i> , 2002, 35, L105-L107.	1.3	26
157	Nanostructured Ceramics for Biomedical Implants. <i>Journal of Nanoscience and Nanotechnology</i> , 2002, 2, 293-312.	0.9	135
158	Mechanical properties of pulsed laser-deposited hydroxyapatite thin films for applications in biomedical implants. <i>Materials Research Society Symposia Proceedings</i> , 2002, 750, 1.	0.1	1
159	Thermal Stability of Nanocrystalline Diamond Films Grown by Microwave Plasma Chemical Vapor Deposition. <i>Materials Research Society Symposia Proceedings</i> , 2002, 750, 1.	0.1	0
160	Nanoindentation hardness and adhesion investigations of vapor deposited nanostructured diamond films. <i>Journal of Applied Physics</i> , 2002, 91, 5347-5352.	1.1	51
161	Very high growth rate chemical vapor deposition of single-crystal diamond. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 12523-12525.	3.3	222
162	Gas-phase thermodynamic models of nitrogen-induced nanocrystallinity in chemical vapor-deposited diamond. <i>Applied Physics Letters</i> , 2002, 80, 2550-2552.	1.5	28

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163	Novel β -Phase of Titanium Metal at Megabar Pressures. <i>Physical Review Letters</i> , 2001, 86, 3068-3071.	2.9	182
164	Single-Wall Carbon Nanotubes under High Pressures to 62 GPa Studied Using Designer Diamond Anvils. <i>Journal of Nanoscience and Nanotechnology</i> , 2001, 1, 143-147.	0.9	15
165	Nanoindentation of Pressure Quenched Fullerenes and Zirconium Metal from a Diamond Anvil Cell. <i>Materials Research Society Symposia Proceedings</i> , 2000, 649, 7241.	0.1	1
166	Nitrogen incorporation in diamond films homoepitaxially grown by chemical vapour deposition. <i>Journal of Physics Condensed Matter</i> , 2000, 12, L519-L524.	0.7	8
167	Nanoindentation and x-ray diffraction studies of pressure-induced amorphization in C-70 fullerene. <i>Applied Physics Letters</i> , 2000, 77, 851-853.	1.5	17
168	Phase transformations and equation of state of praseodymium metal to 103 GPa. <i>Physical Review B</i> , 2000, 62, 2965-2968.	1.1	42
169	Nanoindentation hardness and atomic force microscope imaging studies of pressure-quenched zirconium metal. <i>Applied Physics Letters</i> , 2000, 77, 3568-3570.	1.5	7
170	Epitaxial diamond encapsulation of metal microprobes for high pressure experiments. <i>Applied Physics Letters</i> , 2000, 77, 3400-3402.	1.5	126
171	δ -uranium phase in compressed neodymium metal. <i>Physical Review B</i> , 2000, 61, R3768-R3771.	1.1	35
172	Interfacial adhesion and toughness of nanostructured diamond coatings. <i>Journal of Materials Research</i> , 2000, 15, 1052-1055.	1.2	22
173	Electrical and Mechanical Properties of C70 Fullerene and Graphite under High Pressures Studied Using Designer Diamond Anvils. <i>Physical Review Letters</i> , 2000, 85, 5364-5367.	2.9	80
174	Interfacial oxide and carbide phases in the deposition of diamond films on beryllium metal. <i>Diamond and Related Materials</i> , 2000, 9, 1327-1330.	1.8	5
175	Multilayer nanocrystalline/microcrystalline diamond films studied by laser reflectance interferometry. <i>Diamond and Related Materials</i> , 2000, 9, 1512-1517.	1.8	32
176	Ultrapressure equation of state of cerium metal to 208 GPa. <i>Journal of Applied Physics</i> , 1999, 85, 2451-2453.	1.1	48
177	Effect of nitrogen addition on the microstructure and mechanical properties of diamond films grown using high-methane concentrations. <i>Journal of Applied Physics</i> , 1999, 86, 698-700.	1.1	67
178	Structural and Electronic Transitions in Ytterbium Metal to 202 GPa. <i>Physical Review Letters</i> , 1999, 82, 1712-1715.	2.9	46
179	High pressure phase transformations in neodymium studied in a diamond anvil cell using diamond-coated rhenium gaskets. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 6515-6520.	0.7	18
180	Multiple twinning and nitrogen defect center in chemical vapor deposited homoepitaxial diamond. <i>Diamond and Related Materials</i> , 1999, 8, 2022-2031.	1.8	55

#	ARTICLE	IF	CITATIONS
181	Microcrystalline and Nanocrystalline Diamond Film Deposition on Cobalt Chrome Alloy. Materials Research Society Symposia Proceedings, 1999, 594, 307.	0.1	1
182	Phase transformation in lutetium metal at 88 GPa. Physical Review B, 1998, 57, 10221-10223.	1.1	18
183	In situ diagnostics of film thickness and surface roughness of diamond films on a Ti-6Al-4V alloy by optical pyrometry. Applied Physics Letters, 1998, 73, 181-183.	1.5	23
184	Mechanical properties and quality of diamond films synthesized on Ti-6Al-4V alloy using the microwave plasmas of CH ₄ /H ₂ and CO/H ₂ systems. Journal of Applied Physics, 1998, 83, 198-204.	1.1	13
185	High density plasma processing of nanostructured diamond films on metals. Journal of Applied Physics, 1998, 84, 6469-6471.	1.1	46
186	Nitrogen Defect Concentration in Chemical Vapor Deposited Homoepitaxial Diamond at High Temperature. Materials Research Society Symposia Proceedings, 1998, 555, 239.	0.1	0
187	Nitrogen-Induced Nanocrystallinity of CVD Diamond Films on Ti-6Al-4V Alloys. Materials Research Society Symposia Proceedings, 1998, 555, 377.	0.1	3
188	Growth and Modification of Diamond Anvils by Chemical Vapor Deposition.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 957-959.	0.1	0
189	High Pressure-High Temperature Studies of Precursors Used in the Synthesis of C ₃ N ₄ .. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 992-994.	0.1	0
190	Phase Transformations in Heavy Rare Earth Metal Lutetium to 270GPa.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 227-229.	0.1	0
191	Homoepitaxial diamond films on diamond anvils with metallic probes: the diamond/metal interface up to 74 GPa. Journal of Physics Condensed Matter, 1997, 9, L67-L73.	0.7	14
192	Spatially resolved in situ diagnostics for plasma-enhanced chemical vapor deposition film growth. Review of Scientific Instruments, 1997, 68, 1860-1865.	0.6	9
193	Pressure-induced blueshift of Nd ³⁺ fluorescence emission in YAlO ₃ : Near infrared pressure sensor. Applied Physics Letters, 1997, 71, 2602-2604.	1.5	26
194	Resonance Raman and photoluminescence investigations of micro-twins in homoepitaxially grown chemical vapor deposited diamond. Applied Physics Letters, 1997, 71, 321-323.	1.5	16
195	Growth of Diamond Anvils for High-Pressure Research by Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 1997, 499, 179.	0.1	1
196	Image Plate X-Ray Diffraction Study of Distorted FCC Phase in Rare Earth Metals at High Pressures. Materials Research Society Symposia Proceedings, 1997, 499, 435.	0.1	0
197	Structure And Stress Evaluation Of Diamond Films Deposited On Ti-6Al-4V Alloy At Low Temperature Using CH ₄ /O ₂ /H ₂ And CO/H ₂ Gas Mixtures. Materials Research Society Symposia Proceedings, 1997, 505, 629.	0.1	2
198	Micro-Raman stress investigations and X-ray diffraction analysis of polycrystalline diamond (PCD) tools. Diamond and Related Materials, 1996, 5, 1159-1165.	1.8	67

#	ARTICLE	IF	CITATIONS
199	Pressure-induced amorphization in gadolinium scandium gallium garnet by x-ray diffraction and spectroscopic studies. <i>Journal of Physics Condensed Matter</i> , 1996, 8, L139-L145.	0.7	11
200	Diffraction study of actinides under pressure. <i>High Pressure Research</i> , 1996, 14, 393-404.	0.4	3
201	High-pressure and high-temperature studies on oxide garnets. <i>Physical Review B</i> , 1996, 54, 6200-6209.	1.1	60
202	Fluorescence emission from high purity synthetic diamond anvil to 370 GPa. <i>Applied Physics Letters</i> , 1996, 68, 2049-2051.	1.5	20
203	Photoluminescence and x-ray diffraction studies on Sm-doped yttrium aluminum garnet to ultrahigh pressures of 338 GPa. <i>Journal of Applied Physics</i> , 1996, 79, 7978-7982.	1.1	20
204	Liu and Vohra Reply:. <i>Physical Review Letters</i> , 1996, 77, 1661-1661.	2.9	3
205	Phase transformation in Mo - Ru alloy induced by laser heating at high pressures. <i>Journal of Physics Condensed Matter</i> , 1996, 8, L647-L652.	0.7	0
206	A micro-Raman investigation of high-pressure quenched graphite. <i>Journal of Physics Condensed Matter</i> , 1996, 8, 3963-3963.	0.7	2
207	Defects and Morphology of Homoepitaxial Diamond Films on Natural Nonplanar and Isotopically Pure Planar Substrates. <i>Materials Research Society Symposia Proceedings</i> , 1995, 416, 63.	0.1	0
208	Crystal grain growth during phase transformation in cerium metal at high pressure. <i>Physical Review B</i> , 1995, 52, 9107-9110.	1.1	24
209	Cubic-to-rhombohedral transformation in boron nitride induced by laser heating: In situ Raman-spectroscopy studies. <i>Physical Review B</i> , 1995, 51, 8591-8594.	1.1	39
210	Pressure-concentration (P-X) diagram for the Ce-Th alloy system. <i>Scripta Metallurgica Et Materialia</i> , 1995, 32, 2081-2085.	1.0	5
211	High density plasma processing of diamond films on titanium: Residual stress and adhesion measurements. <i>Journal of Applied Physics</i> , 1995, 78, 7053-7058.	1.1	32
212	Homoepitaxial diamond film deposition on a brilliant cut diamond anvil. <i>Applied Physics Letters</i> , 1995, 66, 1486-1488.	1.5	27
213	Defect center in diamond thin films observed by micro-Raman and photoluminescence studies. <i>Physical Review B</i> , 1994, 49, 5046-5049.	1.1	16
214	Ultrahigh-pressure phase transformations in the Ce _{0.43} Th _{0.57} alloy: Implications for f-electron behavior under compression. <i>Physical Review B</i> , 1994, 50, 2751-2753.	1.1	6
215	Sm:YAG optical pressure sensor to 180 GPa: Calibration and structural disorder. <i>Applied Physics Letters</i> , 1994, 64, 3386-3388.	1.5	43
216	Metastable phases of carbon during fracture of diamond under ultrahigh compressive stresses. <i>Diamond and Related Materials</i> , 1994, 3, 1087-1090.	1.8	16

#	ARTICLE	IF	CITATIONS
217	Raman Modes of 6H Polytype of Silicon Carbide to Ultrahigh Pressures: A Comparison with Silicon and Diamond. <i>Physical Review Letters</i> , 1994, 72, 4105-4108.	2.9	125
218	Pressure dependence of the fluorescence spectra of the Sm: doped YAG to 73 GPa. <i>Solid State Communications</i> , 1993, 88, 417-419.	0.9	13
219	Onset of f-bonding in light actinide and lanthanide metals at ultrahigh pressures. <i>Physica B: Condensed Matter</i> , 1993, 190, 1-4.	1.3	11
220	Thorium under strong compression—a test case for the evaluation of EOS data by different forms and procedures. <i>High Pressure Research</i> , 1993, 11, 223-237.	0.4	31
221	Phase stability and the equation of state of the transition-metal alloy Mo-Re at high pressure. <i>Physical Review B</i> , 1993, 47, 11559-11562.	1.1	5
222	Isotopically pure diamond anvil for ultrahigh pressure research. <i>Applied Physics Letters</i> , 1992, 61, 2860-2862.	1.5	19
223	Thorium: Phase transformations and equation of state to 300 GPa. <i>High Pressure Research</i> , 1992, 10, 681-685.	0.4	15
224	The effect of nonhydrostaticity on measuring the pressure in metals by energy dispersive X-ray diffraction in the diamond anvil cell. <i>High Pressure Research</i> , 1991, 6, 183-186.	0.4	13
225	Temperature dependence of the β -bcc phase transition in zirconium metal. <i>Physical Review B</i> , 1991, 44, 10374-10376.	1.1	78
226	The closing diamond anvil optical window in multimegabar research. <i>Journal of Applied Physics</i> , 1991, 69, 6413-6416.	1.1	56
227	A new ultra-high pressure phase in samarium. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1991, 158, 89-92.	0.9	27
228	Generating near-Earth-core pressures with type-IIa diamonds. <i>Applied Physics Letters</i> , 1991, 59, 2681-2682.	1.5	4
229	f-bonding in thorium metal at extreme compressions: Phase transitions to 300 GPa. <i>Physical Review Letters</i> , 1991, 67, 3563-3566.	2.9	90
230	High-pressure optical studies on sulfur to 121 GPa: Optical evidence for metallization. <i>Physical Review Letters</i> , 1991, 67, 2998-3001.	2.9	100
231	Miniaturization techniques for obtaining static pressures comparable to the pressure at the center of the earth: X-ray diffraction at 416 GPa. <i>Review of Scientific Instruments</i> , 1990, 61, 3830-3833.	0.6	142
232	New high-pressure phase transition in zirconium metal. <i>Physical Review Letters</i> , 1990, 64, 204-207.	2.9	211
233	Static compression of metals Mo, Pb, and Pt to 272 GPa: Comparison with shock data. <i>Physical Review B</i> , 1990, 42, 8651-8654.	1.1	98
234	bcc lead at 109 GPa: Diffraction studies to 208 GPa. <i>Physical Review B</i> , 1990, 41, 7338-7340.	1.1	38

#	ARTICLE	IF	CITATIONS
235	Pressure dependence of the 4T ₂ and 4T ₁ absorption bands of ruby to 35 GPa. <i>Physical Review B</i> , 1990, 41, 5372-5381.	1.1	114
236	Optical reflectivity and amorphization of GaAs during decompression from megabar pressures. <i>Applied Physics Letters</i> , 1990, 57, 2666-2668.	1.5	34
237	Crystal structures of group IVa metals at ultrahigh pressures. <i>Physical Review B</i> , 1990, 42, 6736-6738.	1.1	159
238	Experimental study of the crystal stability and equation of state of Si to 248 GPa. <i>Physical Review B</i> , 1990, 41, 12021-12028.	1.1	148
239	Optical properties of diamond at pressures of the center of Earth. <i>Applied Physics Letters</i> , 1990, 57, 1007-1009.	1.5	22
240	Structural phase transitions in InSb to 66 GPa. <i>Physical Review B</i> , 1989, 40, 12450-12456.	1.1	31
241	Multimegabar pressures using synthetic diamond anvils. <i>Applied Physics Letters</i> , 1989, 55, 232-234.	1.5	10
242	Evidence for the Insulator-Metal Transition in Xenon from Optical, X-Ray, and Band-Structure Studies to 170 GPa. <i>Physical Review Letters</i> , 1989, 62, 669-672.	2.9	131
243	Near-infrared photoluminescence bands in diamond. <i>Physical Review B</i> , 1989, 39, 5464-5467.	1.1	11
244	Structural phase transitions in GaAs to 108 GPa. <i>Physical Review B</i> , 1989, 39, 1280-1285.	1.1	119
245	Near-infrared photoluminescence due to nitrogen platelets in type Ia diamonds. <i>Solid State Communications</i> , 1989, 70, 705-708.	0.9	11
246	Tin at high pressure: An energy-dispersive x-ray-diffraction study to 120 GPa. <i>Physical Review B</i> , 1989, 39, 10359-10361.	1.1	91
247	Optical absorption and reflectivity measurements at ultra high pressures. <i>Scripta Metallurgica</i> , 1988, 22, 145-150.	1.2	5
248	High-pressure x-ray diffraction study of CeO ₂ to 70 GPa and pressure-induced phase transformation from the fluorite structure. <i>Physical Review B</i> , 1988, 38, 7755-7758.	1.1	177
249	Pressure profiles at multimegabar pressures in a diamond anvil cell using x-ray diffraction. <i>Review of Scientific Instruments</i> , 1988, 59, 318-321.	0.6	18
250	Static Pressure of 255 GPa (2.55 Mbar) by X-Ray Diffraction: Comparison with Extrapolation of the Ruby Pressure Scale. <i>Physical Review Letters</i> , 1988, 61, 574-577.	2.9	40
251	Synthetic diamonds produce pressure of 125 GPa (1.25 Mbar). <i>Journal of Materials Research</i> , 1987, 2, 614-618.	1.2	8
252	High-pressure studies of NaH to 54 GPa. <i>Physical Review B</i> , 1987, 36, 7664-7667.	1.1	80

#	ARTICLE	IF	CITATIONS
253	High-pressure x-ray-diffraction and optical-absorption studies of NH ₄ I to 75 GPa. Physical Review B, 1987, 35, 4954-4958.	1.1	12
254	Phase transitions in GaSb to 110 GPa (1.1 Mbar). Physical Review B, 1987, 36, 4543-4546.	1.1	53
255	Polychromatic x-ray beam produced by a wiggler: A new dimension in x-ray diffraction at megabar pressures. Review of Scientific Instruments, 1987, 58, 1887-1890.	0.6	7
256	Pressure-induced metallization of BaSe. Physical Review B, 1987, 35, 874-876.	1.1	52
257	hcp to fcc transition in silicon at 78 GPa and studies to 100 GPa. Physical Review Letters, 1987, 58, 775-777.	2.9	153
258	High-pressure x-ray diffraction studies on rhenium up to 216 GPa (2.16 Mbar). Physical Review B, 1987, 36, 9790-9792.	1.1	99
259	Microcollimated energy-dispersive x-ray diffraction apparatus for studies at megabar pressures with a synchrotron source. Review of Scientific Instruments, 1986, 57, 2560-2563.	0.6	70
260	Phase-Transition Studies of Germanium to 1.25 Mbar. Physical Review Letters, 1986, 56, 1944-1947.	2.9	178
261	High-pressure phase transitions and the equations of state of BaS and BaO. Physical Review B, 1986, 33, 4221-4226.	1.1	106
262	Band-Overlap Metallization of Cesium Iodide. Physical Review Letters, 1985, 55, 977-979.	2.9	29
263	High-pressure phase transitions and equation of state of the III-V compound InAs up to 27 GPa. Physical Review B, 1985, 31, 7344-7348.	1.1	89
264	High pressure structural phase transitions in Dysprosium to 202 GPa. High Pressure Research, 0, , 1-10.	0.4	1