Mingguang Yao

List of Publications by Year
in descending order

59 papers	1,307 citations	361413 20 h-index	361022 35 g-index
59 all docs	59 docs citations	59 times ranked	1426 citing authors

#	Article	IF	Citations
1	Enhanced Relaxor Behavior and Energyâ€Storage Properties in Na_{0.5}Bi_{0.5}TiO₃â€Based Ceramics by Doping the Complex Ions (Al_{0.5}Nb_{0.5})⁴⁺. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	1.8	2
2	Enhanced energy storage and photoluminescence properties in ErBiO3-doped (Na0.5Bi0.5)TiO3-SrTiO3 ceramics. Journal of Materials Science, 2022, 57, 229-240.	3.7	4
3	Structural Evolution of D _{5h}(1)-C₉₀ under High Pressure: A Mediate Allotrope of Nanocarbon from Zero-Dimensional Fullerene to One-Dimensional Nanotube. Chinese Physics Letters, 2022, 39, 056101.	3.3	2
4	Diamond-graphite nanocomposite synthesized from multi-walled carbon nanotubes fibers. Carbon, 2021, 172, 138-143.	10.3	20
5	Anomalous phonon softening of G-band in compressed graphitic carbon nitride due to strong electrostatic repulsion. Applied Physics Letters, 2021, 118, .	3.3	2
6	SERS Selective Enhancement on Monolayer MoS₂ Enabled by a Pressure-Induced Shift from Resonance to Charge Transfer. ACS Applied Materials & Interfaces, 2021, 13, 26551-26560.	8.0	23
7	Molecular insertion regulates the donor-acceptor interactions in cocrystals for the design of piezochromic luminescent materials. Nature Communications, 2021, 12, 4084.	12.8	41
8	Ultrahard bulk amorphous carbon from collapsed fullerene. Nature, 2021, 599, 599-604.	27.8	99
9	Band-gap engineering and structure evolution of confined long linear carbon chains@double-walled carbon nanotubes under pressure. Carbon, 2020, 159, 266-272.	10.3	20
10	Significantly narrowed bandgap and enhanced charge separation in porous, nitrogen-vacancy red g-C3N4 for visible light photocatalytic H2 production. Applied Surface Science, 2020, 504, 144407.	6.1	36
11	Pressure tuned photoluminescence and band gap in two-dimensional layered g-C₃N₄: the effect of interlayer interactions. Nanoscale, 2020, 12, 12300-12307.	5.6	25
12	Decompression-Induced Diamond Formation from Graphite Sheared under Pressure. Physical Review Letters, 2020, 124, 065701.	7.8	41
13	Negative Volume Compressibility in Sc₃N@C₈₀â€“Cubane Cocrystal with Charge Transfer. Journal of the American Chemical Society, 2020, 142, 7584-7590.	13.7	20
14	One-step synthesis of few layers g-C3N4 with suitable band structure and enhanced photocatalytic activities. Chemical Physics Letters, 2019, 732, 136613.	2.6	6
15	Pressure-Induced Emission Enhancement and Multicolor Emission for 1,2,3,4-Tetraphenyl-1,3-cyclopentadiene: Controlled Structure Evolution. Journal of Physical Chemistry Letters, 2019, 10, 5557-5562.	4.6	33
16	Study on disordered graphitic nanocarbon under pressure and their transformation into polycrystalline nanodiamond. Chemical Physics Letters, 2019, 730, 491-496.	2.6	2
17	Transparent aerogel-like diamond nanofilms from glassy carbon by high pressure and high temperature. Diamond and Related Materials, 2019, 96, 90-96.	3.9	6
18	Crystallized phosphorus/carbon composites with tunable P C bonds by high pressure and high temperature. Journal of Physics and Chemistry of Solids, 2019, 130, 250-255.	4.0	6

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19	Pressure-induced SERS enhancement in a MoS₂/Au/R6G system by a two-step charge transfer process. Nanoscale, 2019, 11, 21493-21501.	5.6	48
20	Increasing Interlayer Coupling Prevented the Deformation in Compressed Multilayer WSe₂. Journal of Physical Chemistry C, 2018, 122, 10261-10266.	3.1	5
21	New Ordered Structure of Amorphous Carbon Clusters Induced by Fullereneâ€“Cubane Reactions. Advanced Materials, 2018, 30, e1706916.	21.0	18
22	Tuning the band gap and the nitrogen content in carbon nitride materials by high temperature treatment at high pressure. Carbon, 2018, 130, 170-177.	10.3	29
23	Ordered Amorphous Carbon: New Ordered Structure of Amorphous Carbon Clusters Induced by Fullerene-Cubane Reactions (Adv. Mater. 22/2018). Advanced Materials, 2018, 30, 1870156.	21.0	0
24	Direct Conversion of Graphene Aerogel into Low-Density Diamond Aerogel Composed of Ultrasmall Nanocrystals. Journal of Physical Chemistry C, 2018, 122, 13193-13198.	3.1	9
25	Graphdiyne under pressure: A Raman study. Applied Physics Letters, 2018, 113, .	3.3	10
26	Raman study of graphene nanoribbon analogs confined in singleâ€walled carbon nanotubes and their highâ€pressure transformations. Journal of Raman Spectroscopy, 2017, 48, 951-957.	2.5	4
27	Remarkable cycle-activated capacity increasing in onion-like carbon nanospheres as lithium battery anode material. Nanotechnology, 2017, 28, 035704.	2.6	7
28	Uniaxial-stress-driven transformation in cold compressed glassy carbon. Applied Physics Letters, 2017, 111, .	3.3	25
29	Superhard three-dimensional carbon with metallic conductivity. Carbon, 2017, 123, 311-317.	10.3	61
30	Novel Superhard <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>s</mml:mi><mml:msup><mml:mi>p</mml:mi><mml:mn>3</mml:mn></mml:msup></mml:mro Carbon Allotrope from Cold-Compressed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mrow><mml:mn>70</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Peapods. Physical Review Letters, 2017, 118, 245701.	7.8	100
31	Effect of C₇₀ rotation on the photoluminescence spectra of compressed C₇₀*mesitylene. Journal of Raman Spectroscopy, 2017, 48, 437-442.	2.5	7
32	Pressure-induced transformations in carbon nano-onions. Journal of Applied Physics, 2016, 119, .	2.5	10
33	Structural Stability and Deformation of Solvated Sm@C2(42)-C90 under High Pressure. Scientific Reports, 2016, 6, 31213.	3.3	5
34	Unexpected photoluminescence properties from one-dimensional molecular chains. Nanoscale, 2016, 8, 1456-1461.	5.6	4
35	Tailoring Building Blocks and Their Boundary Interaction for the Creation of New, Potentially Superhard, Carbon Materials. Advanced Materials, 2015, 27, 3962-3968.	21.0	34
36	Ac impedance of A₄C₆₀fullerides under pressure. New Journal of Physics, 2015, 17, 023010.	2.9	5

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37	Pressure-induced transformations of onion-like carbon nanospheres up to 48 GPa. Journal of Chemical Physics, 2015, 142, 034702.	3.0	17
38	Acoustic and elastic properties of silicone oil under high pressure. RSC Advances, 2015, 5, 38056-38060.	3.6	5
39	Polarized Raman Study of Aligned Multiwalled Carbon Nanotubes Arrays under High Pressure. Journal of Physical Chemistry C, 2015, 119, 27759-27767.	3.1	15
40	The effect of hydrogenation on the growth of carbon nanospheres and their performance as anode materials for rechargeable lithium-ion batteries. Nanoscale, 2015, 7, 1984-1993.	5.6	18
41	A New Carbon Phase Constructed by Longâ€Range Ordered Carbon Clusters from Compressing C₇₀ Solvates. Advanced Materials, 2014, 26, 7257-7263.	21.0	29
42	Transparent, superhard amorphous carbon phase from compressing glassy carbon. Applied Physics Letters, 2014, 104, 021916.	3.3	34
43	Structural transformation of confined iodine in the elliptical channels of AlPO4-11 crystals under high pressure. Physical Chemistry Chemical Physics, 2014, 16, 8301.	2.8	14
44	Pressure-induced transformation and superhard phase in fullerenes: The effect of solvent intercalation. Applied Physics Letters, 2013, 103, .	3.3	29
45	Facile synthesis of hydrogenated carbon nanospheres with a graphite-like ordered carbon structure. Nanoscale, 2013, 5, 11306.	5.6	36
46	Pressure-Driven Topological Transformations of Iodine Confined in One-Dimensional Channels. Journal of Physical Chemistry C, 2013, 117, 25052-25058.	3.1	21
47	Probing factors affecting the Raman modes and structural collapse of singleâ€walled carbon nanotubes under pressure. Physica Status Solidi (B): Basic Research, 2013, 250, 1370-1375.	1.5	4
48	In situ Raman and photoluminescence study on pressureâ€induced phase transition in C 60 nanotubes. Journal of Raman Spectroscopy, 2012, 43, 737-740.	2.5	15
49	High pressure studies of alkali metal doped fullerides A4C60. Diamond and Related Materials, 2011, 20, 600-603.	3.9	5
50	Raman study of the electronâ€“phonon interaction in light alkali metal intercalated metallic fullerides. Journal of Physics Condensed Matter, 2011, 23, 115701.	1.8	4
51	Pressure-induced transformation in Na<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>C<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>60</mml:mn></mml:msub></mml:math>polymer: X-ray diffraction and Raman scattering experiments. Physical Review B, 2011, 84, .	3.2	17
52	Reversible nano-scale phase separation of Rb₄C₆₀under pressure. Journal of Physics: Conference Series, 2010, 215, 012020.	0.4	2
53	Laser-induced transformation of Li4C60 and Na4C60 polymers into metallic monomeric fulleride phases. Chemical Physics Letters, 2010, 489, 64-68.	2.6	2
54	Effect of high pressure on electrical transport in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Li</mml:mtext></mml:mrow><mml:mn>4</mml:mn></mml:msub polymer from 100 to 400 K. Physical Review B, 2010, 81, .	3.2	11

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55	Rotational dynamics of confined C ₆₀ from near-infrared Raman studies under high pressure. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22135-22138.	7.1	43
56	Electrical transport properties of<i>A</i>₄C₆₀(<i>A</i>=Li, Na, and Rb) under pressure. High Pressure Research, 2008, 28, 597-600.	1.2	7
57	Raman signature to identify the structural transition of single-wall carbon nanotubes under high pressure. Physical Review B, 2008, 78, .	3.2	79
58	Highly Enhanced Luminescence from Single-Crystalline C60Â·1m-xylene Nanorods. Chemistry of Materials, 2006, 18, 4190-4194.	6.7	117
59	Photoluminescence properties of high-pressure-polymerized C60 nanorods in the orthorhombic and tetragonal phases. Applied Physics Letters, 2006, 89, 181925.	3.3	14