Guo-Hua Zhong

List of Publications by Year
in descending order

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144 papers	3,472 citations	185998 28 h-index	161609 54 g-index
148 all docs	148 docs citations	148 times ranked	4396 citing authors

#	Article	IF	Citations
1	Nitrogen containing organics: A promising high capacity anode for potassium ion batteries. Journal of Physics and Chemistry of Solids, 2022, 161, 110415.	1.9	4
2	Selenium Vacancies and Synergistic Effect of Near- and Far-Field-Enabled Ultrasensitive Surface-Enhanced Raman-Scattering-Active Substrates for Malaria Detection. Journal of Physical Chemistry Letters, 2022, 13, 1453-1463.	2.1	4
3	Thermal conductivity of materials under pressure. Nature Reviews Physics, 2022, 4, 319-335.	11.9	46
4	Hybridization-driven strong anharmonicity in Yb-filled skutterudites. Physical Review B, 2022, 105, .	1.1	4
5	High-temperature superconductivity below 100ÂGPa in ternary C-based hydrides <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>M</mml:mi><mml:msub><mml:mi mathvariant="normal">C</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:mrow></mml:math> with		

#	Article	IF	Citations
19	Kinetic Processes and Surfactant Design of Group I Elements on the CZTS (1Ì…1Ì…2Ì…) Surface. Journal of Physical Chemistry C, 2021, 125, 376-384.	1.5	3
20	A combined experiment and first-principles study on lattice dynamics of thermoelectric CuInTe2. Journal of Alloys and Compounds, 2020, 822, 153610.	2.8	14
21	Metallization and superconductivity in methane doped by beryllium at low pressure. Physical Chemistry Chemical Physics, 2020, 22, 1069-1077.	1.3	19
22	Superconductivity in Sodium Potassium Alloy Doped 2,2â€²-Bipyridine from Near-Room-Temperature Synthesis. Journal of Physical Chemistry C, 2020, 124, 906-912.	1.5	7
23	Poly-p-phenylenes as Novel Bulk-type Anode Materials for Potassium-Ion Batteries: A First-Principles Study. Journal of Physical Chemistry C, 2020, 124, 23045-23051.	1.5	6
24	Giant room-temperature barocaloric effect at the electronic phase transition in Ni_{1âˆ’x}Fe_xS. Materials Horizons, 2020, 7, 2690-2695.	6.4	33
25	Structures, electronic properties, and superconductivities of alkaline-earth metal-doped phenanthrene and charge transfer characteristics of metal-doped phenanthrene. Physical Chemistry Chemical Physics, 2020, 22, 23847-23855.	1.3	2
26	Strongly Correlated Molecular Magnet with Curie Temperature above 60 K. Matter, 2020, 2, 1639-1650.	5.0	6
27	Role of Optical Phonons in Bulk Molybdenum Diselenide Thermal Properties Probed by Advanced Raman Spectroscopy. Physica Status Solidi (B): Basic Research, 2020, 257, 2000251.	0.7	3
28	Superconductivity in La and Y hydrides: Remaining questions to experiment and theory. Matter and Radiation at Extremes, 2020, 5, .	1.5	61
29	[n]Phenacenes: Promising Organic Anodes for Potassium-Ion Batteries. Journal of Physical Chemistry C, 2020, 124, 6964-6970.	1.5	13
30	Preparation of Cu2ZnSn(SxSe1âˆ’x)4 solar cells with two step sulfurization. Solar Energy, 2020, 197, 73-77.	2.9	6
31	High-performance x-ray source based on graphene oxide-coated Cu2S nanowires grown on copper film. Nanotechnology, 2020, 31, 485202.	1.3	3
32	Identification of the incommensurate structure transition in biphenyl by Raman scattering. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 206, 202-206.	2.0	10
33	Discovery of Superconductivity in Potassium-Doped Tri-p-tolylbismuthine. Journal of Physical Chemistry C, 2019, 123, 19105-19111.	1.5	8
34	Metallization and superconductivity in potassium-doped methane. International Journal of Modern Physics C, 2019, 30, 1950061.	0.8	11
35	Phonon Anharmonicity of Tungsten Disulfide. Journal of Physical Chemistry C, 2019, 123, 25509-25514.	1.5	12
36	Alkaliâ€Metalâ€Intercalated Percolation Network Regulates Selfâ€Assembled Electronic Aromatic Molecules. Advanced Materials, 2019, 31, e1807178.	11.1	11

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37	Temperature effect on vibrational properties of crystalline p-quaterphenyl. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 213, 199-203.	2.0	7
38	Tuning the electronic and magnetic properties of metal-doped phenanthrene by codoping method. AIP Advances, 2019, 9, .	0.6	2
39	Lattice dynamics of thermoelectric palladium sulfide. Journal of Alloys and Compounds, 2019, 798, 484-492.	2.8	11
40	Orderâ€“disorder transition in p-oligophenyls. Physical Chemistry Chemical Physics, 2019, 21, 13590-13599.	1.3	10
41	Superconductivity of lightâ€metal hydrides. Journal of the Chinese Chemical Society, 2019, 66, 1246-1256.	0.8	7
42	Superconductivity and Its Enhancement in Polycyclic Aromatic Hydrocarbons. Frontiers in Physics, 2019, 7, .	1.0	11
43	Flexible and High Performance Piezoresistive Pressure Sensors Based on Hierarchical Flower-Shaped SnSe₂ Nanoplates. ACS Applied Energy Materials, 2019, 2, 2803-2809.	2.5	25
44	Superconductors: Alkaliâ€Metalâ€Intercalated Percolation Network Regulates Selfâ€Assembled Electronic Aromatic Molecules (Adv. Mater. 11/2019). Advanced Materials, 2019, 31, 1970079.	11.1	1
45	Structure, charge transfer, and superconductivity of M-doped phenanthrene (M = Al, Ga, and In): A comparative study of K-doped cases. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	4
46	Effect of the Inherent Structure of Rh Nanocrystals on the Hydriding Behavior under Pressure. Journal of Physical Chemistry Letters, 2019, 10, 774-779.	2.1	5
47	Phonon scattering processes in molybdenum disulfide. Applied Physics Letters, 2019, 114, .	1.5	16
48	Strongly Correlated Aromatic Molecular Conductor. Small, 2019, 15, e1900299.	5.2	4
49	Superconductivity in an organometallic compound. Physical Chemistry Chemical Physics, 2019, 21, 25976-25981.	1.3	10
50	Touchpoint-Tailored Ultrasensitive Piezoresistive Pressure Sensors with a Broad Dynamic Response Range and Low Detection Limit. ACS Applied Materials & Interfaces, 2019, 11, 2551-2558.	4.0	108
51	Raman Characterization on Two-Dimensional Materials-Based Thermoelectricity. Molecules, 2019, 24, 88.	1.7	19
52	Superconductivity and Phase Stability of Potassium-Intercalated p-Quaterphenyl. Journal of Physical Chemistry Letters, 2019, 10, 40-47.	2.1	35
53	Magnetoelectric Radical Hydrocarbons. Advanced Materials, 2019, 31, e1806263.	11.1	4
54	Magnetoelectrics: Magnetoelectric Radical Hydrocarbons (Adv. Mater. 3/2019). Advanced Materials, 2019, 31, 1970019.	11.1	0

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55	Superconductivity and phase stability of potassium-doped p-quinquephenyl. Carbon, 2019, 143, 837-843.	5.4	28
56	Crystal Structure and Magnetic Property of Potassium-Doped 9-Methylanthracene. Advances in Condensed Matter Physics, 2019, 08, 77-85.	0.1	1
57	Structural and Bonding Characteristics of Potassium-Doped p-Terphenyl Superconductors. Journal of Physical Chemistry C, 2018, 122, 3801-3808.	1.5	36
58	Room temperature ferromagnetism in naphthalene. Carbon, 2018, 136, 125-129.	5.4	10
59	Solids, liquids, and gases under high pressure. Reviews of Modern Physics, 2018, 90, .	16.4	337
60	Mode GrÃ¼neisen parameters of an efficient thermoelectric half-Heusler. Journal of Applied Physics, 2018, 124, .	1.1	12
61	Superconductivity at 3.5 K and/or 7.2 K in potassium-doped triphenylbismuth. Journal of Chemical Physics, 2018, 149, 144502.	1.2	16
62	Superconductivity and phase stability of potassium-doped biphenyl. Physical Chemistry Chemical Physics, 2018, 20, 25217-25223.	1.3	31
63	Large-scale synthesis of single-crystalline self-standing SnSe₂ nanoplate arrays for wearable gas sensors. Nanotechnology, 2018, 29, 455501.	1.3	37
64	Vibrational Properties of p-Terphenyl. Journal of Physical Chemistry A, 2018, 122, 6903-6908.	1.1	9
65	Phonon anharmonicity in thermoelectric palladium sulfide by Raman spectroscopy. Applied Physics Letters, 2018, 113, .	1.5	27
66	Magnetic Transitions in K-Doped Biphenyl and ${p}$ -Terphenyl. IEEE Transactions on Magnetics, 2018, 54, 1-5.	1.2	3
67	Improved performance of all-solid-state lithium batteries using LiPON electrolyte prepared with Li-rich sputtering target. Solid State Ionics, 2018, 324, 202-206.	1.3	48
68	Superconductivity in solid benzene molecular crystal. Journal of Physics Condensed Matter, 2018, 30, 245703.	0.7	5
69	Lattice Dynamics and Thermal Stability of Cubic-Phase CsPbI₃ Quantum Dots. Journal of Physical Chemistry Letters, 2018, 9, 4915-4920.	2.1	33
70	Structural and electronic properties of potassium-doped 1,2;8,9-dibenzopentacene superconductor: comparing with doped [7]phenacenes. Molecular Physics, 2017, 115, 472-483.	0.8	18
71	First-principles prediction on geometrical and electronic properties of K-doped chrysene. Journal of Physics and Chemistry of Solids, 2017, 104, 56-61.	1.9	14
72	The first-principles investigations on magnetic ground-state in Sm-doped phenanthrene. AIP Advances, 2017, 7, 055704.	0.6	3

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73	Magnetic moment and spin state transition on rare monovalent iron ion in nitridoferrate Ca₆Li_{0.5}Fe_{0.5}Te₂N₃. Journal of Materials Chemistry C, 2017, 5, 733-737.	2.7	1
74	Aluminumâ€Doped Cesium Lead Bromide Perovskite Nanocrystals with Stable Blue Photoluminescence Used for Display Backlight. Advanced Science, 2017, 4, 1700335.	5.6	303
75	Structural and antiferromagnetic properties of Sm-doped chrysene. AIP Advances, 2017, 7, 055707.	0.6	2
76	The atomic structures and electronic properties of potassium-doped phenanthrene from a first-principles study. Journal of Materials Chemistry C, 2016, 4, 11566-11571.	2.7	11
77	High-pressure structural properties of tetramethylsilane. Chinese Physics B, 2016, 25, 026104.	0.7	2
78	Realization of insulating state and superconductivity in the Rashba semiconductor BiTeCl. Physical Review B, 2016, 93, .	1.1	23
79	Hydrogen sulfide at high pressure: Change in stoichiometry. Physical Review B, 2016, 93, .	1.1	97
80	Transition metals doped CuAlSe₂for promising intermediate band materials. Materials Research Express, 2016, 3, 045905.	0.8	16
81	Combined experimental and computational study of high-pressure behavior of triphenylene. Scientific Reports, 2016, 6, 25600.	1.6	12
82	Structural and electronic properties of solid naphthalene under pressure: density functional calculations. European Physical Journal B, 2016, 89, 1.	0.6	5
83	Pressure-induced ferromagnetic half-metallicity in cobaltocene. Europhysics Letters, 2016, 113, 27005.	0.7	3
84	Induced effects by the substitution of Zn in Cu2ZnSnX4 (X= S and Se). Thin Solid Films, 2016, 603, 224-229.	0.8	42
85	Theoretical study on structural and electronic properties of solid anthracene under high pressure by density functional theory. Molecular Physics, 2016, 114, 283-289.	0.8	7
86	Research Progress of Aromatic Superconductor. Advances in Condensed Matter Physics, 2016, 05, 37-44.	0.1	0
87	Mapping potential energy landscape of a probing atom in a complex surface environment. Physical Review B, 2015, 92, .	1.1	2
88	Controlling adsorption and spin configurations of Co atoms on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Si</mml:mi><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:math>-(1×1). Physical Review B, 2015, 91, .	1.1	6
89	Pressure-induced superconductivity in H2-containing hydride PbH4(H2)2. Scientific Reports, 2015, 5, 16475.	1.6	35
90	Zero-Point Effects on Phase Transitions of Thorium Dihydride under High Pressure. Journal of Physical Chemistry C, 2015, 119, 13465-13471.	1.5	7

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91	Absence of phase transformation of dense anthracene from Raman scattering. High Pressure Research, 2015, 35, 379-387.	0.4	0
92	High-pressure study of isoviolanthrone by Raman spectroscopy. Journal of Chemical Physics, 2014, 140, 244314.	1.2	4
93	Antiferromagnetism in Potassium-Doped Polycyclic Aromatic Hydrocarbons. IEEE Transactions on Magnetics, 2014, 50, 1-3.	1.2	16
94	Mechanical and thermodynamic properties of Î±-UH3 under pressure. Journal of Alloys and Compounds, 2014, 604, 171-174.	2.8	9
95	Constraint on the potassium content for the superconductivity of potassium-intercalated phenanthrene. Journal of Chemical Physics, 2014, 140, 114301.	1.2	36
96	Phase transitions of actinium dihydride: Pressure-induced charge transfer driving effect. International Journal of Hydrogen Energy, 2014, 39, 15827-15835.	3.8	7
97	Lower critical field and SNS-Andreev spectroscopy of 122-arsenides: Evidence of nodeless superconducting gap. Physical Review B, 2014, 90, .	1.1	31
98	Thermodynamic and mechanical properties of actinium and lanthanum dihydride. Journal of Alloys and Compounds, 2014, 616, 42-46.	2.8	2
99	Pressure-Induced Metallization of Molybdenum Disulfide. Physical Review Letters, 2014, 113, 036802.	2.9	239
100	Structural and vibrational properties of phenanthrene under pressure. Journal of Chemical Physics, 2013, 139, 104302.	1.2	24
101	Superconductivity in GeH4(H2)2 above 220GPa high-pressure. Physica B: Condensed Matter, 2013, 410, 90-92.	1.3	11
102	Half-metallicity in the ferrimagnet [MnII(enH)(H2O)][CrIII(CN)6]Â·H2O: Ab initio study. Solid State Communications, 2013, 158, 61-64.	0.9	0
103	Vibrational and structural properties of tetramethyltin under pressure. Journal of Chemical Physics, 2013, 138, 024307.	1.2	8
104	First-principles investigations on the magnetic property in tripotassium doped picene. Journal of Applied Physics, 2013, 113, 17E131.	1.1	14
105	Phase transformations and vibrational properties of coronene under pressure. Journal of Chemical Physics, 2013, 139, 144308.	1.2	35
106	Phase transitions in a hydrogen-rich compound: tetramethylsilane. Chinese Physics C, 2013, 37, 098001.	1.5	0
107	Probing the generalized magicity of Ag nanoclusters constructed on Si(111) by atomic manipulation. Physical Review B, 2013, 88, .	1.1	7
108	High-pressure study of tetramethylsilane by Raman spectroscopy. Journal of Chemical Physics, 2012, 136, 024503.	1.2	9

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109	High-pressure phases of a hydrogen-rich compound: Tetramethylgermane. Physical Review B, 2012, 86, .	1.1	7
110	Structural, Electronic, Dynamical, and Superconducting Properties in Dense GeH₄(H₂)₂. Journal of Physical Chemistry C, 2012, 116, 5225-5234.	1.5	55
111	Ga vacancy induced ferromagnetism enhancement and electronic structures of RE-doped GaN. Physica B: Condensed Matter, 2012, 407, 3818-3827.	1.3	15
112	The structural, elastic and electronic properties of BiI3: First-principles calculations. Physica B: Condensed Matter, 2012, 407, 735-739.	1.3	22
113	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:mi>tin</mml:mi><mml:mo>â†'</mml:mo><mml:mi>I</mml:mi><mml:mi>m</mml:mi> Transitions of Germanium. Physical Review Letters, 2011, 106, 135502.	2.9	38
114	Structural, electronic, and dynamical properties of methane under high pressure. Journal of Chemical Physics, 2011, 134, 064515.	1.2	12
115	High-pressure and substitution induced effects in SrRuO3: First-principles insights. Journal of Applied Physics, 2011, 109, .	1.1	2
116	Superconductivity in Hydrogen-rich Material: GeH4. Journal of Superconductivity and Novel Magnetism, 2010, 23, 717-719.	0.8	22
117	Ground state properties of perovskite and post-perovskite CaRuO3: Ferromagnetism reduction. Solid State Sciences, 2010, 12, 2003-2009.	1.5	3
118	Yb5Ni4Sn10 and Yb7Ni4Sn13: New polar intermetallics with 3D framework structures. Journal of Solid State Chemistry, 2010, 183, 920-926.	1.4	5
119	Enhancement of superconductivity by pressure-driven competition in electronic order. Nature, 2010, 466, 950-953.	13.7	102
120	Structural transitions of solid germane under pressure. Europhysics Letters, 2010, 90, 66006.	0.7	22
121	Reactive interface formation and Co-induced <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:msqrt><mml:mn>7</mml:mn></mml:msqrt><mml: on a GaN(0001) pseudo-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"		

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127	Oxygen vacancy configuration of Î´-Bi₂O₃: an ab initio study. Physica Status Solidi (B): Basic Research, 2009, 246, 97-101.	0.7	19
128	Eu3Co2In15 and KM2In9 (M = Co, Ni): 3D Frameworks Based on Transition Metal Centered In9 Clusters. Inorganic Chemistry, 2009, 48, 2526-2533.	1.9	12
129	Syntheses and crystal structures of Y7Co6Sn23 and RE5Co6Sn18 (RE=Sc, Ho). Journal of Alloys and Compounds, 2009, 485, 124-131.	2.8	9
130	Chemical bonding, electronic, and magnetic properties ofR3Co4Sn13intermetallics (R=La, Ce, Sm, Gd,) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.1	24
131	All-electron study of ultra-incompressible superhard material ReB 2 : structural and electronic properties. Chinese Physics B, 2009, 18, 4437-4442.	0.7	11
132	The doping effects in Î´-Bi₂O₃ oxide ionic conductor. Physica Status Solidi (B): Basic Research, 2008, 245, 2737-2742.	0.7	19
133	Yb3CoSn6 and Yb4Mn2Sn5: New polar intermetallics with 3D open-framework structures. Journal of Solid State Chemistry, 2008, 181, 2448-2455.	1.4	22
134	Electronic and magnetic structures of 4f in Ga_{1â^'x}Gd_xN. Journal of Physics Condensed Matter, 2008, 20, 295221.	0.7	11
135	Pressure-induced metallization of silane. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20-23.	3.3	156
136	Superconducting Behavior in Compressed Solid<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>SiH</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math>with a Layered Structure. Physical Review Letters, 2008, 101, 077002.	2.9	110
137	Strongly Correlated Effect in TiS 2. Chinese Physics Letters, 2007, 24, 1050-1053.	1.3	16
138	Crystal structure of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Si</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>at high pressure. Physical Review B, 2007, 76, .	1.1	63
139	Induced effects by the substitution of Mg in MgCNi3. Journal of Applied Physics, 2007, 101, 09G520.	1.1	6
140	The effect of electronic orbital interactions on p-type doping tendency in ZnO series: First-principles calculations. Chinese Physics B, 2007, 16, 3815-3819.	1.3	2
141	Anisotropic properties of TaS ₂. Chinese Physics B, 2007, 16, 3809-3814.	1.3	17
142	Spin-Polarized Transport in Carbon Nanowires Inside Semiconducting Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 10130-10134.	1.5	12
143	Ionic transport properties in doped Î´-Bi2O3. Journal of Physics: Conference Series, 2006, 29, 106-109.	0.3	16
144	Pressure-induced phonon frequency shifts in transition-metal nitrides. Physical Review B, 2004, 70, .	1.1	72