Sae Hwan Chun

List of Publications by Year
in descending order

46	1,533	394421 19	302126 39
papers	citations	h-index	g-index

47	47	47	2183
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direct evidence for dominant bond-directional interactions in a honeycomb lattice iridate Na2IrO3. Nature Physics, 2015, 11, 462-466.	16.7	321
2	Electric Field Control of Nonvolatile Four-State Magnetization at Room Temperature. Physical Review Letters, 2012, 108, 177201.	7.8	156
3	Realization of Giant Magnetoelectricity in Helimagnets. Physical Review Letters, 2010, 104, 037204.	7.8	144
4	Experimental observation of the liquid-liquid transition in bulk supercooled water under pressure. Science, 2020, 370, 978-982.	12.6	143
5	Electrical control of large magnetization reversal in a helimagnet. Nature Communications, 2014, 5, 4208.	12.8	77
6	Field-induced incommensurate-to-commensurate phase transition in the magnetoelectric hexaferrite Ba<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>0</mml:mn><mml:mo>.</mml:mo><mml:mn>5</mml:mn></mml:mrow></mml:msub><mml:mrow	3.2	65
7	Mapping the emergence of molecular vibrations mediating bond formation. Nature, 2020, 582, 520-524.	27.8	55
8	Low-magnetic-field control of dielectric constant at room temperature realized in Ba_{0.5}Sr_{1.5}Zn₂Fe₁₂O₂₂. New Journal of Physics, 2009, 11, 073030.	2.9	50
9	Electric polarization and field-induced multiferroicity of the Co<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Y-type hexaferrite Ba<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>0.3</mml:mn></mml:mrow></mml:msub></mml:math>Sr<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow	3.2	47
10	High-brightness self-seeded X-ray free-electron laser covering the 3.5â€‰keV to 14.6â€‰keV range. Nature Photonics, 2021, 15, 435-441.	31.4	47
11	Electric polarization enhancement in multiferroic CoCr2O4 crystals with Cr-site mixing. Applied Physics Letters, 2009, 94, .	3.3	40
12	Magnetoelectricity in multiferroic hexaferrites as understood by crystal symmetry analyses. Physical Review B, 2018, 98, .	3.2	33
13	Quantitative Measurements of Size-Dependent Magnetoelectric Coupling in Fe₃O₄ Nanoparticles. Nano Letters, 2016, 16, 7408-7413.	9.1	31
14	Subnanosecond phase transition dynamics in laser-shocked iron. Science Advances, 2020, 6, eaaz5132.	10.3	29
15	Chemical doping-induced flop of ferroelectric polarization in multiferroic<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Mn</mml:mtext></mml:mrow><mml:mrow><mml:mn>0.9</mml:mn></mml:mrow> Physical Review B, 2010, 82, .	3.2	26
16	Magnetic Origin of Giant Magnetoelectricity in Doped Y-type Hexaferrite<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Ba</mml:mi></mml:mrow><mml:mrow><mml:mn>0.5</mml:mn></		

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19	Electromagnon with Sensitive Terahertz Magnetochromism in a Room-Temperature Magnetoelectric Hexaferrite. Physical Review Letters, 2018, 120, 027202.	7.8	19
20	Hard X-ray self-seeding commissioning at PAL-XFEL. Journal of Synchrotron Radiation, 2019, 26, 1101-1109.	2.4	17
21	Observation of new magnetic ground state in frustrated quantum antiferromagnet spin-liquid system Cs2CuCl4. Low Temperature Physics, 2017, 43, 901-904.	0.6	13
22	Magnetic Excitations across the Metal-Insulator Transition in the Pyrochlore Iridate <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Eu</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>7</mml:mn></mml:mrow></mml:msub></mml:mrow></mml: Physical Review Letters, 2018, 120, 177203.	7.8	12
23	Intense Reactivity in Sulfurâ€“Hydrogen Mixtures at High Pressure under X-ray Irradiation. Journal of Physical Chemistry Letters, 2020, 11, 1828-1834.	4.6	11
24	Optical Kerr Effect of Liquid Acetonitrile Probed by Femtosecond Time-Resolved X-ray Liquidography. Journal of the American Chemical Society, 2021, 143, 14261-14273.	13.7	11
25	Ultrafast Carrierâ€“Lattice Interactions and Interlayer Modulations of Bi₂Se₃ by X-ray Free-Electron Laser Diffraction. Nano Letters, 2021, 21, 8554-8562.	9.1	10
26	Recent Progress of the PAL-XFEL. Applied Sciences (Switzerland), 2022, 12, 1010.	2.5	10
27	X-ray free electron laser heating of water and gold at high static pressure. Communications Materials, 2021, 2, .	6.9	9
28	Control of magnetoelectric coupling in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Co</mml:mi><mml:mn>2</mml:mn></mml: mathvariant="normal">Y</mml:mi></mml:mrow></mml:math> -type hexaferrites. Physical Review Materials, 2021, 5, .	2.4	8
29	Following the Crystallization of Amorphous Ice after Ultrafast Laser Heating. Journal of Physical Chemistry B, 2022, 126, 2299-2307.	2.6	8
30	57Fe NMR study of the magnetoelectric hexaferrite Ba0.5Sr1.5Zn2Fe12O22and Ba0.5Sr1.5Zn2(Fe0.92Al0.08)12O22. Physical Review B, 2013, 88, .	3.2	7
31	Competing Magnetic Anisotropy Fields and Double Polarization Flops in Multiferroic Mn_{1-x}Co_xWO₄. Journal of the Physical Society of Japan, 2013, 82, 124716.	1.6	6
32	Field- and temperature-induced evolution of the magnetocaloric effect in Ba_{0.3}Sr_{1.7}Co₂Fe₁₂O₂₂single crystals with heliconical magnetism. Journal of Physics Condensed Matter, 2013, 25, 256006.	1.8	6
33	Controlling symmetry of spin-orbit entangled pseudospin state through uniaxial strain. Physical Review B, 2020, 102, .	3.2	6
34	Publisherâ€™s Note: Realization of Giant Magnetoelectricity in Helimagnets [Phys. Rev. Lett.104, 037204 (2010)]. Physical Review Letters, 2010, 104, .	7.8	5
35	Effects of Al substitution and thermal annealing on magnetoelectric Ba_{0.5}Sr_{1.5}Zn₂Fe₁₂O₂₂investigated by the enhancement factor of⁵⁷Fe nuclear magnetic resonance. Journal of Physics Condensed Matter, 2014, 26, 146004.	1.8	5
36	Non-thermal fluence threshold for femtosecond pulsed x-ray radiation damage in perovskite complex oxide epitaxial heterostructures. Applied Physics Letters, 2019, 115, .	3.3	5

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37	Optical magnons with dominant bond-directional exchange interactions in the honeycomb lattice iridate <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi><mml:mo>â^'</mml:mo><mml:mrow><mml:msub><mml:mi Physical Review B, 2021, 103, .	3.2	5
38	Robust long-range magnetic correlation across antiphase domain boundaries in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Sr</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">CrReO</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>. Physical Review B, 2021, 103, .	3.2	5
39	Structural Evidence for Ultrafast Polarization Rotation in Ferroelectric/Dielectric Superlattice Nanodomains. Physical Review X, 2021, 11, .	8.9	5
40	Commensurate transverse helical ordering in the room-temperature magnetoelectric Co2Z hexaferrite. Physica B: Condensed Matter, 2018, 551, 122-126.	2.7	4
41	Magnetic excitations in the double-perovskite iridates <mml:math		