

# Dorj Odkhuu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3441106/publications.pdf>

Version: 2024-02-01

79  
papers

1,765  
citations

361413

20  
h-index

302126

39  
g-index

85  
all docs

85  
docs citations

85  
times ranked

2810  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic properties of new $(1-x)\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3+x\text{BaNiO}_3$ solid solution materials. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	3
2	First-principles study on magnetocrystalline anisotropy of cobalt films: hcp vs fcc. Current Applied Physics, 2022, 41, 148-155.	2.4	2
3	First-Principles Prediction of Enhanced Magnetic Anisotropy of $\text{Fe}_{1-x}\text{Ni}_x$ -Phase $\text{Fe}_{1-x}\text{Ni}_x$ , With B and C Impurities. IEEE Transactions on Magnetics, 2021, 57, 1-3.	2.1	3
4	Magnetic and optical properties of new $(1-x)\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3+x\text{CaMnO}_3$ solid solution materials. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 263, 114902.	3.5	14
5	First-principles prediction of rare-earth free permanent magnet: FeNi with enhanced magnetic anisotropy and stability through interstitial boron. AIP Advances, 2021, 11, .	1.3	5
6	Simultaneous tuning of the magnetic anisotropy and thermal stability of $\alpha$ - $\text{Fe}_{16}\text{N}_2$ phase. Scientific Reports, 2021, 11, 7823.	3.3	6
7	Experimental and theoretical studies on induced ferromagnetism of new $(1-x)\text{Fe}_{1-x}\text{Ni}_x$ based alloys as rare-earth free high-performance permanent magnet across transition: A theoretical insight. Acta Materialia, 2021, 210, 116807.	3.3	21
8	Non-BCS-type superconductivity and critical thickness of $\text{SrTiO}_3/\text{LaAlO}_3/\text{SrTiO}_3$ trilayer interface system. Applied Surface Science, 2021, 565, 150495.	7.9	6
9	Enhancing magnetic anisotropy and stability of $\alpha$ - $\text{Fe}_{16}\text{N}_2$ phase by Co and V co-substitution. AIP Advances, 2021, 11, .	6.1	4
10	Study of Structural and Magnetic Properties of Spinel Zn Doped Cobalt Ferrites. Solid State Phenomena, 2020, 310, 124-133.	1.3	5
11	Enhancing Energy Product and Thermal Stability of $\text{SmFe}_{12}$ by Interstitial Doping. Physical Review Applied, 2020, 13, .	3.8	16
12	Experimental and theoretical studies on the room-temperature ferromagnetism in new $(1-x)\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3+x\text{CoTiO}_3$ solid solution materials. Vacuum, 2020, 179, 109551.	3.5	15
13	Enhanced voltage-controlled magnetic anisotropy via magnetoelasticity in $\text{FePt}/\text{MgO}(001)$ . Physical Review B, 2020, 101, .	3.2	9
14	Influenced of $\text{Bi}(\text{Ti}_{1/2}\text{Ni}_{1/2})\text{O}_3$ concentration on the structural, optical and magnetic properties of lead-free $\text{Bi}_{1/2}\text{Na}_{1/2}\text{TiO}_3$ materials. Vacuum, 2020, 177, 109306.	3.5	12
15	First-principles prediction of a two-dimensional vanadium carbide (MXene) as the anode for lithium ion batteries. Physical Chemistry Chemical Physics, 2020, 22, 5807-5818.	2.8	40
16	Enhancing room-temperature ferromagnetism in $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ via $\text{FeTiO}_3$ solid solution. Journal of Electroceramics, 2020, 44, 129-135.	2.0	10
17	Intrinsic and tunable ferromagnetism in $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ through $\text{CaFeO}_3$ modification. Scientific Reports, 2020, 10, 6189.	3.3	32

#	ARTICLE	IF	CITATIONS
19	Strain tunable spin reorientation of an individual Fe atom on 2D blue phosphorous. Journal of Physics Condensed Matter, 2019, 31, 485802.	1.8	3
20	Itinerant Semiconducting Antiferromagnetism in Metastable V <sub>3</sub> Ga. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900483.	2.4	5
21	Structural, optical, and magnetic properties of a new system of Bi(Mn <sub>0.5</sub> Ti <sub>0.5</sub> )O <sub>3</sub> -modified Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> materials. Materials Research Express, 2019, 6, 106112.	1.6	9
22	First-Principles Prediction of Possible Rare-Earth Free Permanent Magnet of Tetragonal $\langle \text{mml:math} \text{overflow="scroll"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Fe} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \text{Co} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ with Enhanced Magnetic Anisotropy and Energy Product through Interstitial Nitrogen. Physical Review Applied, 2019, 11, .	3.8	21
23	Magnetic and optical properties of new (1-x)Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> +x BaMnO <sub>3</sub> solid solution materials. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	17
24	Magnetic and optical properties of MgMnO <sub>3</sub> -modified Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> materials. Journal of Magnetism and Magnetic Materials, 2019, 482, 31-37.	2.3	19
25	Strain control of magnetic phase transition and perpendicular magnetic anisotropy in Ta/FeRh/MgO(001) heterostructure. AIP Advances, 2019, 9, .	1.3	2
26	Structure, optical and magnetic properties of new Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> - SrMnO <sub>3</sub> solid solution materials. Scientific Reports, 2019, 9, 18186.	3.3	30
27	Modulation of Magnetism and Magnetic Anisotropy at the Heavy-Metal/FeRh Interface. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	4
28	Tunability of magnetic anisotropy of Co on two-dimensional materials by tetrahedral bonding. Physical Review B, 2019, 99, .	3.2	9
29	Role of the Interfacial Rh-layer on Robust Ferromagnetism and Large Perpendicular Magnetic Anisotropy of FeRh Films on MgO(001). Journal of Magnetism and Magnetic Materials, 2019, 476, 487-496.	2.3	6
30	Inducing and manipulating magnetization in 2D zinc oxide by strain and external voltage. Journal of Physics Condensed Matter, 2018, 30, 145802.	1.8	0
31	Strain-driven electric control of magnetization reversal at multiferroic interfaces. Physical Review B, 2018, 97, .	3.2	17
32	Tunable magnetic properties of double perovskite La <sub>2</sub> Fe <sub>2-x</sub> CoxO <sub>6</sub> . Physica B: Condensed Matter, 2018, 540, 33-37.	2.7	10
33	Microstructural, Optical, and Magnetic Properties of BiCoO <sub>3</sub> -Modified Bi <sub>0.5</sub> K <sub>0.5</sub> TiO <sub>3</sub> . Journal of Electronic Materials, 2018, 47, 3414-3420.	2.2	16
34	Defect induced room temperature ferromagnetism in lead-free ferroelectric Bi <sub>0.5</sub> K <sub>0.5</sub> TiO <sub>3</sub> materials. Physica B: Condensed Matter, 2018, 532, 108-114.	2.7	24
35	First-principles study of magnetization reorientation and large perpendicular magnetic anisotropy in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle \text{Cu} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Fe} \langle \text{mml:mi} \rangle \langle \text{mml:math} \text{mathvariant="normal"} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 4 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{MgO} \langle \text{mml:mi} \rangle$ heterostructures. Physical Review B, 2018, 98, .		
36	Theoretical and experimental studies on the influence of Cr incorporation on the structural, optical, and magnetic properties of Bi <sub>0.5</sub> K <sub>0.5</sub> TiO <sub>3</sub> materials. Journal of Sol-Gel Science and Technology, 2018, 87, 528-536.	2.4	17

#	ARTICLE	IF	CITATIONS
37	Thickness effect on magnetocrystalline anisotropy of MnPt(0001) film. Journal of Magnetism and Magnetic Materials, 2018, 467, 69-73.	2.3	3
38	Interfacial magnetic-phase transition mediated large perpendicular magnetic anisotropy in FeRh/MgO by a heavy transition-metal capping. Scientific Reports, 2018, 8, 6900.	3.3	17
39	Electronic-dimensionality reduction of bulk MoS <sub>2</sub> by hydrogen treatment. Physical Chemistry Chemical Physics, 2018, 20, 23007-23012.	2.8	6
40	Electric control of magnetism in low-dimensional magnets on ferroelectric surfaces. AIP Advances, 2017, 7, 055816.	1.3	3
41	Distribution of oxygen functional groups of graphene oxide obtained from low-temperature atomic layer deposition of titanium oxide. RSC Advances, 2017, 7, 13979-13984.	3.6	51
42	Electric control of magnetization reorientation in $\text{FeRh}$ mediated by a magnetic phase transition. Physical Review B, 2017, 96, .	3.2	20
43	Observation of room-temperature ferromagnetism in Co-doped Bi <sub>0.5</sub> K <sub>0.5</sub> TiO <sub>3</sub> materials. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	13
44	Gigantic perpendicular magnetic anisotropy of heavy transition metal cappings on Fe/MgO(001). Journal of Magnetism and Magnetic Materials, 2017, 442, 183-188.	2.3	5
45	Atomic and electronic structure of CdTe/metal (Cu, Al, Pt) interfaces and their influence to the Schottky barrier. Journal of Applied Physics, 2016, 120, .	2.5	15
46	Synthetic hybrid Co <sub>2</sub> FeGe/Ge(Mn) superlattice for spintronics applications. Applied Physics Letters, 2016, 109, 172401.	3.3	0
47	Giant perpendicular magnetic anisotropy of an individual atom on two-dimensional transition metal dichalcogenides. Physical Review B, 2016, 94, .	3.2	28
48	La Displacement Driven Double-Exchange Like Mediation in Titanium $\text{d}_{xy}$ Ferromagnetism at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> . Journal of the Physical Society of Japan, 2016, 85, 043702.	1.6	1
49	Magnetization reversal of giant perpendicular magnetic anisotropy at the magnetic-phase transition in FeRh films on MgO. Physical Review B, 2016, 93, .	3.2	27
50	Giant strain control of magnetoelectric effect in Ta Fe MgO. Scientific Reports, 2016, 6, 32742.	3.3	16
51	Substitution- and strain-induced magnetic phase transition in iron carbide. Journal of the Korean Physical Society, 2016, 69, 1335-1340.	0.7	0
52	Effect of Sintering Temperature on Properties of Lead-Free Piezoelectric 0.975Bi <sub>0.5</sub> (Na <sub>0.82</sub> K <sub>0.18</sub> ) <sub>0.5</sub> TiO <sub>3</sub> -0.025LiTaO <sub>3</sub> Ceramics. Journal of Nanoscience and Nanotechnology, 2016, 16, 7929-7934.	0.9	3
53	Theory of perpendicular magnetocrystalline anisotropy in Fe/MgO (001). Journal of Magnetism and Magnetic Materials, 2016, 414, 126-131.	2.3	18
54	Giant voltage modulation of magnetic anisotropy in strained heavy metal/magnet/insulator heterostructures. Physical Review B, 2015, 92, .	3.2	79

#	ARTICLE	IF	CITATIONS
55	Room-temperature ferromagnetism in Fe-doped wide band gap ferroelectric Bi <sub>0.5</sub> K <sub>0.5</sub> TiO <sub>3</sub> nanocrystals. <i>Materials Letters</i> , 2015, 156, 129-133.	2.6	48
56	Effect of Li <sub>2</sub> CO <sub>3</sub> addition on the structural, optical, ferroelectric, and electric-field-induced strain of lead-free BNKT-based ceramics. <i>Journal of Physics and Chemistry of Solids</i> , 2015, 85, 148-154.	4.0	21
57	Jahn-Teller driven perpendicular magnetocrystalline anisotropy in metastable ruthenium. <i>Physical Review B</i> , 2015, 91, .	3.2	21
58	Magnetocrystalline anisotropy of 4d/5d transition metals on a Co(0001) surface: A first-principles study. <i>Journal of Applied Physics</i> , 2015, 117, 17A327.	2.5	4
59	Magnetism and Magnetocrystalline Anisotropy of $d$ Transition Metal Monolayers on Pt(001): A Density-Functional Study. <i>Journal of Nanoscience and Nanotechnology</i> , 2014, 14, 9011-9013.	0.9	3
60	Titelbild: Development of Double-Perovskite Compounds as Cathode Materials for Low-Temperature Solid Oxide Fuel Cells ( <i>Angew. Chem.</i> 48/2014). <i>Angewandte Chemie</i> , 2014, 126, 13187-13187.	2.0	0
61	Sulfur (anion) manipulated highly polar stable ferroelectric perovskite under epitaxial strain. <i>Journal of Applied Physics</i> , 2014, 116, 194105.	2.5	5
62	A first-principles study of magnetostrictions of Fe <sub>3</sub> O <sub>4</sub> and CoFe <sub>2</sub> O <sub>4</sub> . <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	26
63	Negatively curved carbon as the anode for lithium ion batteries. <i>Carbon</i> , 2014, 66, 39-47.	10.3	72
64	Development of Double-Perovskite Compounds as Cathode Materials for Low-Temperature Solid Oxide Fuel Cells. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 13064-13067.	13.8	176
65	Catalytic Transparency of Hexagonal Boron Nitride on Copper for Chemical Vapor Deposition Growth of Large-Area and High-Quality Graphene. <i>ACS Nano</i> , 2014, 8, 5478-5483.	14.6	48
66	A physical organogel electrolyte: characterized by in situ thermo-irreversible gelation and single-ion-predominant conduction. <i>Scientific Reports</i> , 2013, 3, 1917.	3.3	45
67	Electronic structure and magnetism of various surfaces of the catalytic material Pt <sub>3</sub> Ni: Density-functional study. <i>Journal of Magnetism and Magnetic Materials</i> , 2013, 339, 89-93.	2.3	2
68	A first-principles study of magnetism of lithium fluorosulphate LiFeSO <sub>4</sub> F. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	11
69	Extremely large perpendicular magnetic anisotropy of an Fe(001) surface capped by transition metal monolayers: A density functional study. <i>Physical Review B</i> , 2013, 88, .	3.2	48
70	Strain-induced modification in the magnetic properties of Mn <sub>5</sub> Ge <sub>3</sub> thin films. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	17
71	Synthesis and Characterization of Patronite Form of Vanadium Sulfide on Graphitic Layer. <i>Journal of the American Chemical Society</i> , 2013, 135, 8720-8725.	13.7	300
72	Conversion of multilayer graphene into continuous ultrathin sp <sup>3</sup> -bonded carbon films on metal surfaces. <i>Scientific Reports</i> , 2013, 3, 3276.	3.3	83

#	ARTICLE	IF	CITATIONS
73	Magnetostriction of B2-structured FeX (X = Al, Si, Ni, Ga, Ge, and Sn) Alloys: A First-principles Study. Journal of the Korean Magnetism Society, 2013, 23, 117-121.	0.0	0
74	Electronic origin of the negligible magnetostriction of an electric steel Fe <sub>1-x</sub> Si <sub>x</sub> alloy: A density-functional study. Journal of Applied Physics, 2012, 111, .	2.5	2
75	Magnetocrystalline anisotropy of zinc-blende CrTe (001) surface: A first-principles study. Thin Solid Films, 2011, 519, 8355-8358.	1.8	9
76	Magnetocrystalline anisotropy energy and spin polarization of Fe <sub>3</sub> Si in bulk and on Si(001) and Si(111) substrates. Thin Solid Films, 2011, 519, 8218-8222.	1.8	12
77	Magnetocrystalline Anisotropy of D0 <sub>3</sub> -Fe <sub>3</sub> Si From First-Principles Study. IEEE Transactions on Magnetism, 2011, 47, 2920-2923.	2.1	7
78	Engineering of magnetostriction in Fe <sub>3</sub> Pt <sub>1-x</sub> Ir <sub>x</sub> by controlling the Ir concentration. Applied Physics Letters, 2011, 98, 152502.	3.3	16
79	First-principles investigation of huge magnetostriction in cubic L1 <sub>2</sub> Fe <sub>3</sub> Pt. Journal of Applied Physics, 2010, 107, 09A945.	2.5	12