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Mao Junjie

* * *
* Singh Avinash*
Gangopadhyay Anjasha*
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Kim Sangwook

Munisai Nuermaimaiti

Shiv Kumar
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[1] Wumiti Mansuer 2022 9 2
Development of Laser-ARPES System for the Study of the Electronic Structure of Unconventional Superconductors
ARPES

[2] 2022 9 2
Chiral Symmetry Breaking in Four-fermion Interaction Model with Thermal and Finite-size Effects
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[3] HOU XUEYAO 2022 9 20
First Principal Calculation and Angle-resolved Photoemission Spectroscopy Study of Ultrathin Cr_2O_3 and $CrTe_2$ Films
Cr_2O_3 $CrTe_2$

[4] Amit Kumar 2022 9 20
Angle-resolved Photoemission Spectroscopy Study of Many-body Effects on 3D Topological Insulator Bi_2Te_3
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Core-U：Core Research for Energetic Universe

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Kim Sangwook　International Association of Advanced Materials Award

HOU XUEYAO

The 14th Japan-China Symposium on Ferroelectric Materials and Their Application (JCFMA-14) Best Poster Presentation Award
15th International Symposium on Ferroic Domains & Micro- to Nano-scopic Structures (ISFD-15) Poster Award

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Phenomenological analysis on high-energy heavy-ion collisions: Duke University
Steffen A. Bass

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Construction of parton cascade model Base on SMASH: Frankfurt Univeristy
Hannah Elfner

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Theory of Modified Gravity: ICREA, Barcelona
Sergei D. Odintsov

[4] _____
Twisted Reduced Marix model: Universidad Autónoma de Madrid
Antonio Gonzalez-Arroyo

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(1)Time Variation of Particle Number: Tomsk State Pedagogical University (Russia)
Takata Hiroyuki
(2) Time Variation of Lepton Number: BRIN (,)
Apriadi Salim Adam

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The 3rd IIT Bombay-Hiroshima workshop in HEP, 2023.2.20-22, Hibrid, E102, Fac.of Sci., Hiroshima University.

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[1] “Best poster Award”, Quark Matter 2022, Krakow, Poland, April 2022
A. Sakai, K. Murase, H. Fujii, T. Hirano, “Space-time Evolution of Critical Fluctuations in an Expanding System”

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[19] , , _____, BT14 ,BTcube , BCDI 2 , 2023 3
4 -5 , ,
[20] , , _____, BT , BCDI 2 , 2023 3
4 -5 , ,
[21] , , , , _____, , ,
A15 V_3(Al, Si, Ga, Ge, Sn) , 2023 ,
2023 3 22 -25 ,
[22] , , , _____, ,
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[23] , , , , , , , ,
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$LixCoF_3$, 25 XAFS , ,

○ 6
○ 2
○ 0

○ 12
○ 0
○ 0

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[1] 39 FMA-39, , 2022 6 1 -4 ,
, , _____ , , ,
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[1] _____ ( ) DESJ
[2] _____ ( ) JPS
[3] _____ ( ) CerSJ
[4] _____, _____ FMA
[5] _____ FMA
[6] _____, _____ FMA
[7] _____ Asian Ferroelectric Association (AFA), Executive Board ,
Chair-elect.( )
[8] _____ Journal of Advanced Dielectrics (JAD), Editorial Board
[9] _____ The Dielectrics and Electrical Insulation Society of IEEE (IEEE-DEIS), Technical Committee of Functional Dielectrics
[10] _____ IUCr
[11] _____
[12] _____
[13] _____ ,
[14] Sangwook Kim Materials, Section Editor for Advanced and Functional Ceramics and Glasses
[15] Sangwook Kim Materials, Editoral Board member

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[2] _____

[3] _____

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[3] _____ ,

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[1] _____ ( ) JASRI

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[1] _____ SPring-8 BL02B2 ,
2022 , , ,

[2] _____ SPring-8 BL02B2 , 2022 ,
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[1] _____ 15th International Symposium on Ferroic Domains & Micro- to Nano-scopic Structures (ISFD-15) (2022.8.28-31, Kofu, Hotel Danrokan, Japan), Local Committee, (
) , 81

[2] _____ 14th Japan-China Symposium on Ferroelectric Materials and Their Applications (JCFMA-14) (2022.12.8-9, Kanazawa, Kanazawa Bunka Hall, Japan), Academic Committee,
( ) , 36 , 100

[1] _____
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[2] _____
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[1] _____ 2020 4 1

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[1] _____ B
2022 , 1,820

[2] _____ B
2022 , 715

[3] _____ X
2022 , 0

[4] _____ X
2022 , 1,500

[5] Kim Sangwook
2020-2022 , 2,000

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[1] (M2) Poster Award, 15th International Symposium on Ferroic Domains & Micro- to Nano-scopic Structures (ISFD-15) (2022.8.28-31, Kofu, Hotel Danrokan, Japan)

[2] (M1) 52 , 2022 83
2022 9 20 -23 , ,

[3] (M2) Best Poster Presentation Award, 14th Japan-China Symposium on Ferroelectric Materials and Their Applications (JCFMA-14), (2022.12.8-9, Kanazawa, Kanazawa Bunka Hall, Japan).

[4] Kim Sangwook International Association of Advanced Materials Award (IAAM Award), International Association of Advanced Materials . European Advanced Materials Congress 2022 6

X

X

SPring-8

KEK-PF

X XRD X XAS X XES

PES *in situ*

XAS

XES

X

XAS

( ) X

XES

XES

10 eV

X

X HERFD-XAFS 4

Operando-XES XES

$SrTiO_3$

$SrTiO_3$

Nature Science

$SrTiO_3$

$SrTiO_3$ X

10 nm

$SrTiO_3$

$BaTiO_3$

Acta

Materialia

X

( )

X

Badri Rao

Rao

X

Rao SPring-8 X

2

X

TiO_2

TiO_2

X

TiO_2

(

X

X X

EXAFS

X

/ X

ESRF 2 XRD/XAS

GRC

RMC XAFS

X

X

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458 2 , 2022

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2023.1.7-9,
[7] , _____, , , Ba(Ti1-xSnx)O3 Sn , 35
2023.1.7-9,

[8] , _____, , , , , , , SrTiO3
, 35
2023.1.7-9,
[9] , _____, , , , Anspoks Andris, X
BaTiO3 , 35
2023.1.7-9,
[10] , _____, , , , , , ,
, EXAFS RMC Fe-Ni , 35
2023.1.7-9,
[11] , _____, , _____, , , X
Pd-Rh , 35
2023.1.7-9,
[12] , , _____, Rao Badari, , , , X
AlFeO3 , 35
2023.1.7-9,
[13] , _____, , , , , , ,
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, 35 2023.1.7-9,

[14] , , , , , _____, , A
CaCu3Ti4O12 , 35
2023.1.7-9,
[15] , _____, , , SUS304
, (A) 4 2022.10.1-2, NIMS

[16] , , , , , _____, , A
CaCu3Ti4O12 , 2022.9.12-15,

[17] , , , _____, , , YbNi3Ga9
X , 2022.9.12-15,

[18] , _____, , , , , , ,
, EXAFS Fe55Ni45 ,
25 XAFS 2022.8.2-4, ,

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[1] _____ 15 RCBJSF 3

[2] _____

[3] _____ SPring-8

[4] _____

[5] _____ 26 XAFS

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[2] _____ SPring-8

[3] _____ SPring-8

[1] _____

[1] _____ 1 2

[2] _____ (ESRF) A. Rosa

[3] _____ B. Harihara Venkataraman Aurivllius

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[1] , 2022 10 , 1

[1] _____ (B) 2021 -2023 , 4,000

Fe

[2] _____ (A)
2021 -2022 , 3,000
Fe-Fe
[3] _____ (B) 2020 -2023 , 300

[4] _____ (B) 2022 -2024 , 17,180

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[1] (M2) 25 XAFS , 2022 8 3
[2] (D2) , 2023 3 15
[3] (D3) 3 , 2022 4 3

Angle- resolved photoelectron spectroscopy = ARPES

ARPES

(1) $HfP_{2-x}Se_x$

2010

2

3 ZrSiS

65%

$PbTaSe_2$

40%

$ZrP_{2-x}Se_x$

ڤ

JSPS A
18H03683
S :
17H06138

(2) Fe_3Ga

1.0 μV/K 10-20 μV/K

$Fe_{0.68}Ga_{0.32}$ Fe 2 2.4 μV/K

$D0_3$ Fe_3Ga 4 μV/K

Spin-ARPES Fe-Ga
ARPES
$D0_3$ Fe_3Ga
Spin-ARPES HiSOR BL-9B VLEED
(E_F) $E - E_F = -1.2$ eV

E_F

JSPS A
18H03683
S
17H06152 S
: 17H06138

(3)

RMnSi (R=La,Ce)

P4/nmm T_N ~ 294 K

1(b)

$BaMn_2As_2$ $EuMnBi_2$

RMnSi T_N

RMnSi $q = 0$

LaMnSi CeMnSi

RMnSi (R = La, Ce)

SPring-8 BL25SU HiSOR BL-1 BL-9A X (SX)

(VUV) (ARPES)

SX-ARPES k_z

3 Γ – X

k_x-k_y T_N T 50 K Γ – X

X ARPES

Γ

p VUV ARPES CeMnSi 50 K (< T_N)

LaMnSi

Mn 3d Mn 3d

RMnSi (R=La,Ce)

$q = 0$

(4) $Co_2Cr(Ga,Si)$

Co Co_2CrGa

Co_2CrSi [X. Xu et al., Appl. Phys. Lett. **103**,

164104 2013]

$Co_2Cr(Ga,Si)$

$Co_2Cr(Ga,Si)$

X

X SPring-8 BL15XU, BL23SU

300-20K

X

20K 300K

X

Co 3*d* Cr 3*d*

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2022 2023 3
28 ,

[2] _____, , , , , , ARPES
Fe_4N 4 2023 3 3
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[3] _____, NanoTerasu 36
2023 1 8 , ,

[1] _____,
2022 9 1 , ,

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, _____, Fe_4N
2022 , 2022 9 15 ,

[3] , , _____, _____, _____, , , ,
, , _____, Fe_3Ga 2022
, 2022 9 14 ,
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[4] , , _____, , Shiv Kumar, _____, , , , , , , , , , , , , , , , _____, HfP_{2-} Se 2022 , 2022 9 14 ,

[5] , , , , , _____, _____, _____, __ _____, HiSOR 2022 , 2022 9 13 ,

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[1] _____ 2020 4 -2024 3

[2] _____ 77 78 2021 3 -2023 3

[3] Journal of Electron Spectroscopy and Related Phenomena (Elsevier), Editorial Board

, 4,200 2022

[2] _____ 4 , 1,200 2022

[3] _____ (B) 2022-2024

(Pb,Sn)Te , 300 2022

[4] _____ 2022 , 8,700 2022

[5] _____ (B) 2022-2024

, 7,200 2022

[6] _____ ( ) 2022-2023

, 3,100

2022

[7] _____ (C) 2022-2024

, 1,200 2022

SAM

2022 SAM

SAM

CHC

CHC

10^{-15}

2

π SAM CHC

SAM CHC

SAM

10^{-12}

X

SAM

10nm

2

CHC

SAM 2

SAM

SAM

X XFEL X X

X

XFEL
SACLA
X

SACLA
2022 SACLA X FEL
(NIR) Xe
Xe Xe^{1+} Xe^{2+} 4d

X

SACLA X

X

native
SAM

DPPC DOPC 2 X
2

X
2

NMR -
(NA) (AA)

(CD)
α,β,γ-CD NA
AA
Bruker AVANCE700MHz NMR ^{1}H-NMR 2D-ROESY α-

CD/NA ROESY α-CD NA

2

α-CD NA

γ-CD NA2 1 CD

SACLA Oxford SLAC NRC Canada Turku Kansas

KEK PF
UVSOR

UVSOR
ϱ ” iOR

2]ETOq0.000008871 0 595.32 841.92 reW*nO EMC 10.56 8f1 0 0 1 81.504 565.82 T 0.00008871 0 595.32 841.92 2

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, UVSOR 2022, 2022 11 26 -28 ,
[7] ○ _____, , , _____, _____, , ,
, UVSOR 2022, 2022 11 26 -28 ,
[8] _____, , , _____,
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[9] ○ _____, , , _____, _____, , ,
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[10] _____, , , , You Daehyun, , , , _____, , , , , , ,
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[11] , , _____, , , , , , Salehi Elham, _____,
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[1] _____ 36

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[1] _____, _____ SACLA , , , ,

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[1] _____	C	900	
[2] _____	B	800	
[3] _____			1,560
[4] _____		2,080	

X

2022

R&D ARPES

ARPES

Bi_2Te_3

0.02-0.13

0.2

Re(0001) Tamm Shockley 2

Re(0001) 2

2

Cr_2O_3

$3d_{z2}$

(H2A-H2B) in vitro

37°C 2

H2A-H2B

SPIDER

10 10

2022

111

136 69 50.7 % 67 49.3%

27 9 4 5
2 7
4 1

KEK
KEK KEK
KEK

KEK
KEK
Σ ∩

BL-1 BL-9A % ᵏ Ã

HiSOR

R&D

5 5

5 HiSOR-II

2022

29 15

Flash Poster Session 1

3 3

69 41 18

18

4 3

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4,290 2022 1,430

[2] _____ (A)
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2017	63	7	64	48

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8 Constraints on mass-dependent intrinsic scatter in scaling relations

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Bi_2Te_3

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11 $SrNi_2P_2$ P_2

12

13 ARPES

14 h-BN/Ni(111) Cr Mn

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16

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18 $YbCu_4Ni$

19 Dy_2Fe_{17} Ho_2Fe_{17}

20 XRISM

21

41 $Fe_{72}Pt_{28}$

42 μeV

43

44 $NdPt_6Al_3$

45 CsKSb
GaAs NEA
46 Yb Ge(= Ni, Ir)

47

48 CeTe
49 $DyNi_3Al_9$ Shastry-Sutherland
ErB_4

50 X

51

52
53 GRB Liptak

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55 A review of chiral phase transition in the 1+1 dimensional Gross-Neveu model
56 Yb $YbCuS_2$
Lu, Se
57

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59 Haldane
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