



1 物理科学専攻

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1-2 専攻の組織と運営

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1-3 専攻の大学院教育

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 27 Study of neutral pions in Pb-Pb collisions at $\sqrt{s_{NN}} = 2.76\text{TeV}$ with the PHOS detector at ALICE
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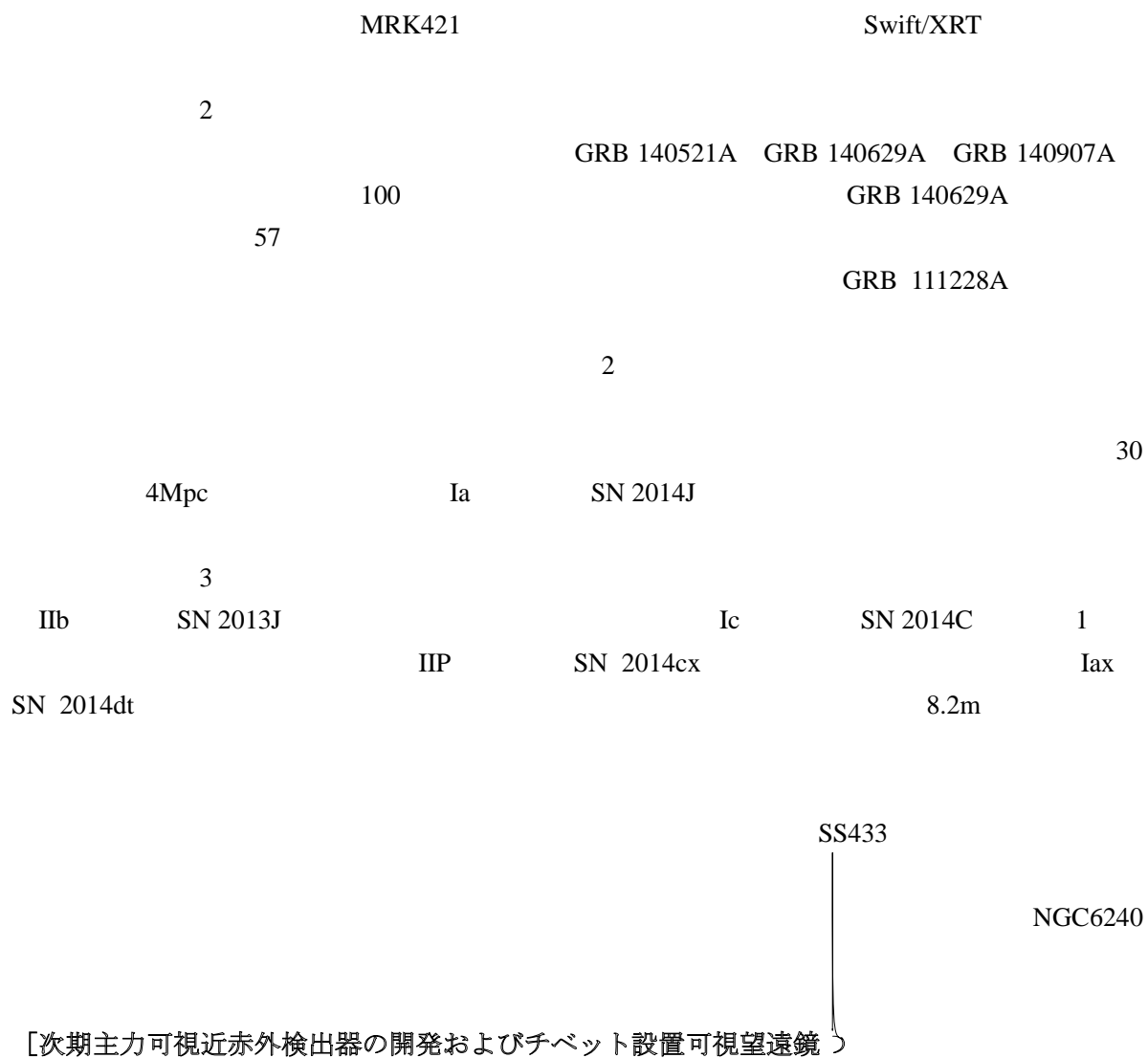
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[PoGOLite気球実験、将来X線ガンマ線観測に向け



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Nagoya University, Oct. 20-24, 2014 190

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Hiroshima University, Mar. 24-26, 2015 35

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- [1] 5th ASTRO-H Summer School
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BL02B2

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KNbO₃

K

Nb O

Bi

Na

(Bi_{1/2}Na_{1/2})TiO₃

Bi Na

Bi

off-centering

off-centering

Bi³⁺

O

Bi

(Bi_{1/2}Na_{1/2})TiO₃

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Application of synchrotron

$(\text{Bi}_{1/2}\text{Na}_{1/2})\text{TiO}_3$ $\langle 100 \rangle$ $\langle 111 \rangle$
109° 180° 71°

Phys. Rev. B

Editors' Suggestion

$\text{BaTiO}_3\text{-Bi}(\text{Mg}_{1/2}\text{Ti}_{1/2})\text{O}_3\text{-BiFeO}_3$

PZT $\text{Pb}(\text{Zr,Ti})\text{O}_3$ (PZT)
180°

BaTiO_3

μ 24 34 10^{-4}
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2015 SPring-8

BaAl_2O_4

4

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Operando

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shear

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X

Fe X

X

Fe X

(2) X XES (CT ,)

XES CT (10 eV)

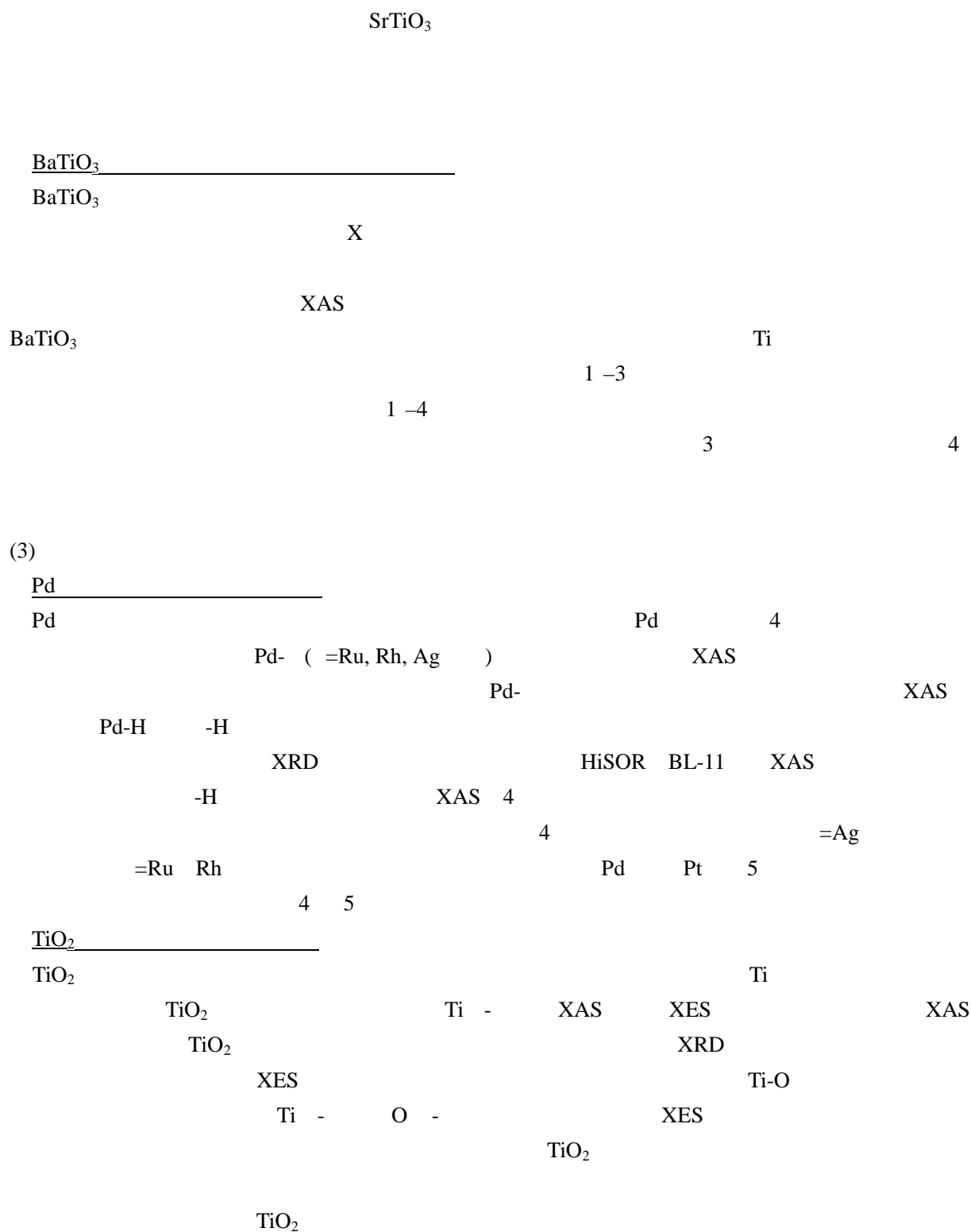
Operando-XES

SrTiO₃
SrTiO₃

SrTiO₃ 2

(Operando) XES

Ti-O (CT) SrTiO₃



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PbBi₄Te₄S₃

PbBi₄Te₄S₃

220meV

Cr V

(Sb, Bi)₂Te₃

SPring-8

Sb 5p Te 5p

Sb₂Te₃

Sb₂Te₃

(2)

Ni₂FeGa

26

Ni₂FeGa

Co

Ni-Fe-Ga-Co

SPring-8 BL15XU

X

SPring-8 BL23SU

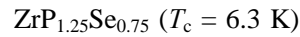
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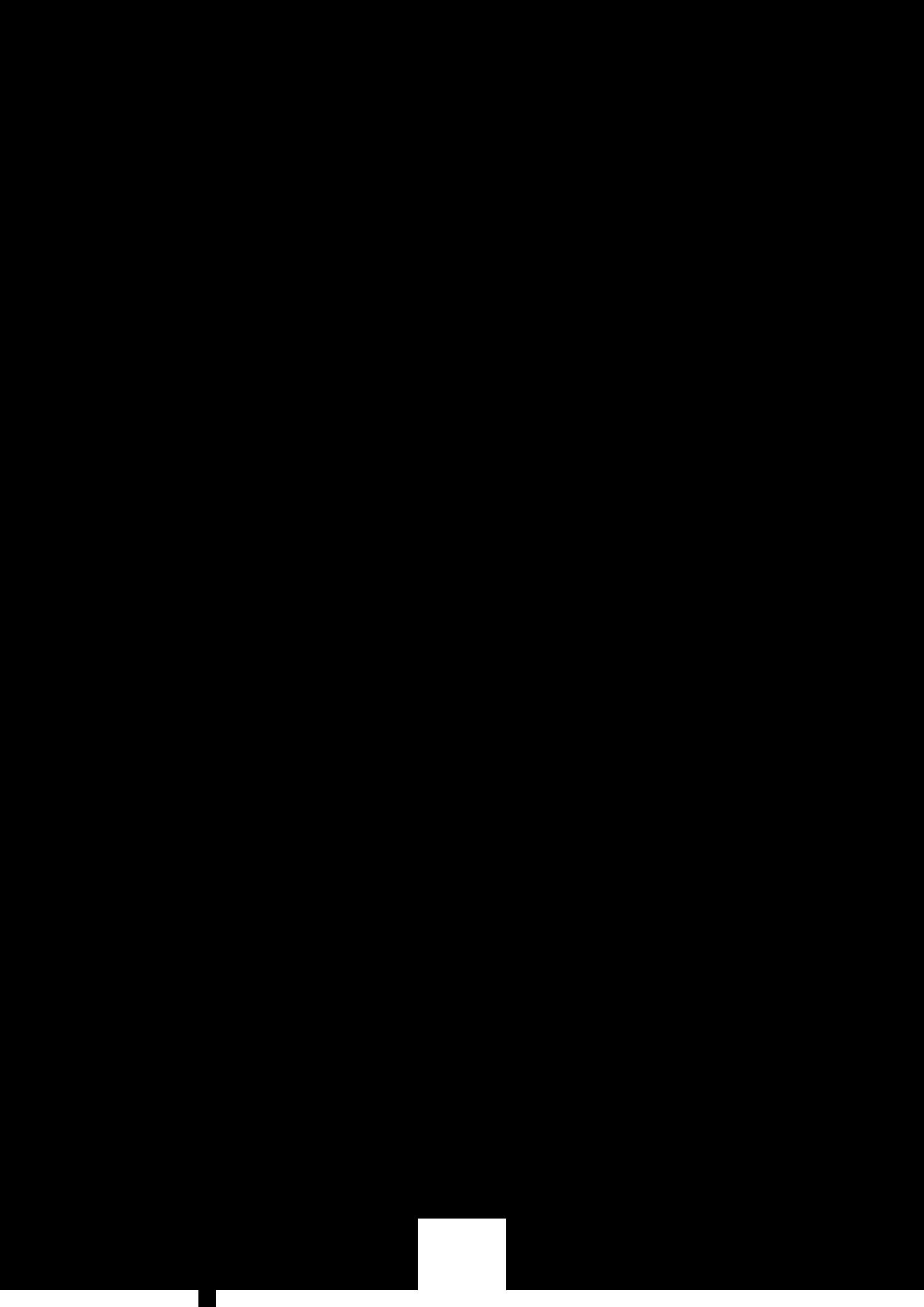


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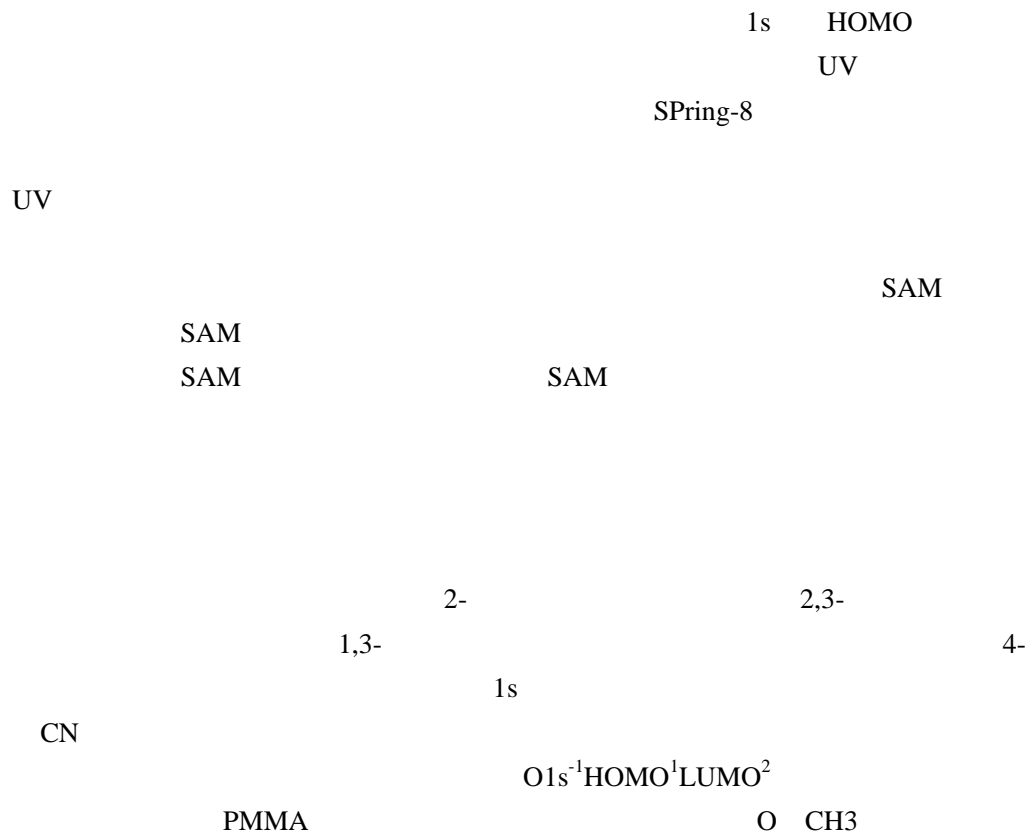
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- [1] Seeing circular dichroism in photoemission of chiral electronic states
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- [2] ARPES studies of proximity effect between topological insulator films and high temperature

- superconductors Shuyun Zhou 4
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- [5] Resolving the electronic and spin structure in doped topological crystalline insulators
Shuyun Zhou 3
- [6] Experimental search for topological Weyl semimetal phase and surface Fermi arcs in magnetically
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- [7] Spin-resolved ARPES of the d-states of IrO₂ 6 TASC
- [8] Detection of a hidden form of spin polarization in 3D bulk centrosymmetric solids
Dan Dessau 4
- [9] Simultaneous determination of pairing and scattering rate effects in cuprate superconductors
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- [10] Spin-orbital texture of Bi-based surface alloys and Sb₂Te₃ probed by polarization- and photon
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M. Zahid Hasan 3
- [12] Investigation of spin-resolved band structure of Sb bilayer on Bi₂Te₂Se
Han Woong Yeom 4
- [13] Spin-resolved angle-resolved photoemission spectroscopy study on the surface states of the
moderately correlated topological insulator YbB₆
Feng Donglai 3
- [14] Towards oxide-based spintronics: Study of spin-polarized states in 2D electron systems at the surface
of transition-metal oxides Andrés F. Santander-Syro 5
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16 17

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A B

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AO	10	25	12
	36	81	38
	20	112	19
	66	218	69

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26	61	7	62	44
25	60	6	61	40
24	73	5	69	50
23	65	5	65	47
22	59	4	58	44

26

27 2 12

3

E102

E203

27 2 12 ()

E102

E203

1

CeRu₂Al₁₀

2

3

Cu₁₂Sb₄S₁₃

4

5

Graphene/Fe/Ni(111)

6

7

8

9

X

ASIC

10

SgrA

G2

11

Ferroelectricity in Atomically Thin MoS₂ Studied From First Principles(MoS₂)

12

13

ILC

14

15

A

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[()₆] () (2) (2)

GUT

HinOTORI

Si

Mo₄O₁₁

X

X

Fe

X

BaAl₂O₄

YFeO₃ -ScFeO₃

2

SAM

TiO₂

Pr

Y_{1-x}Pr_xIr₂Zn₂₀(x 0.3)

YbCuGe

44

2

()

1

() 1

10

1

1