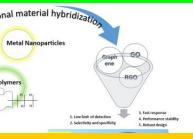




グラフェンベースの有機リン化合物用センシング材料の方法論

A. I. Kamisan *et al.*

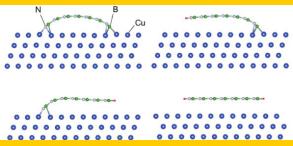
Methodologies of Graphene-based Sensing Material for Organophosphorus Compound

Vol. 21, Iss. 4, pp. 241-250 (2023) (Review Paper)

Review

good excellent severe recent
vulnerable defend op electrochemical reduce
method possible rapid originate
protect trans graphene focus
insecticide warfare detect detection offer
missuse reach detect use alert low experimental easy
limit technological employ into merit achieve

グラフェン/hBNヘテロ構造におけるCVD成長方向の違いの起源に関する理論的研究



H. Kageshima, S. Wang, H. Hibino

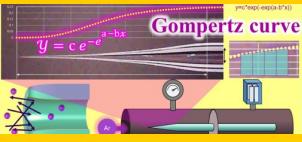
Theoretical Study on Origin of CVD Growth Direction Difference in Graphene/hBN Heterostructures

Vol. 21, Iss. 4, pp. 251-256 (2023) (Regular Paper)

Regular

cu existing n reliable find change van der waals energy
growth gain compare correction use waals speculation
advance propose study h cvd edge hbn method
h cvd island graphene state heterostructures
surface bare der v affect termination vapor
difference

マイクロ・ナノピペットを通るアルゴンガスの流れ

T. Takami *et al.*

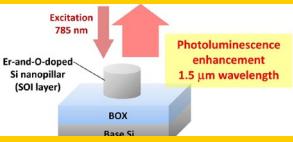
Argon Gas Flow Through Micro- and Nano-pipettes

Vol. 21, Iss. 4, pp. 257-261 (2023) (Regular Paper)

Regular

free molecular non-adiabatic Pet tube miscible fabrication
nanopipettes experimental exit formula
result assume best transform method plot nano glass
transformer intermediate dependence tapered inner utilize consistent
inner dependence develop flow gas calculation
gas calculation vapor promote excite
dependence develop flow gas calculation
gas calculation vapor promote excite

SOI層にナノピラーを作製することによるエルビウム添加シリコンからの室温フォトルミネッセンスの向上

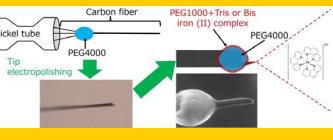
Y. Takahashi *et al.*

Enhancing Room-temperature Photoluminescence from Erbium-doped Silicon by Fabricating Nanopillars in a Silicon-on-Insulator Layer

Vol. 21, Iss. 4, pp. 262-266 (2023) (Regular Paper)

erbium nanopillar enhance infrared unstructured
soi optical atom fabricate dope erbium
show absorption pl highenhance temperature
pl reveal photoluminescence time layer

金属キレート化合物の走査型アトムプローブ分析



Y. Yamauchi, M. Taniguchi

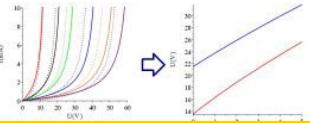
Scanning Atom Probe Analysis of Metal Chelate Compound

Vol. 21, Iss. 4, pp. 267-272 (2023) (Regular Paper)

Regular

metallic develop cf scanning coordinate
charge dissociate metal find analyze bond
microprobe non-probeligand atom scan
complex scan of probe ligand atom ion field detect chelate solid indent
carbon stable support apply use oblique

磁場中でのpn接合の電圧変化



G. Gulyamov, F. Mukhiddinova, G. Majidova

Changing the Voltage of the p-n Junction in a Magnetic Field

Vol. 21, Iss. 4, pp. 273-277 (2023) (Regular Paper)

Regular

mag p junction current new characteristic formula
current find consider calculate obtain base
find calculate develop theoretical characteristic
consider develop obtain base magnetic voltage
analyze magnetic field intensity neighbor
analyze magnetic field intensity neighbor
analyze magnetic field intensity neighbor
analyze magnetic field intensity neighbor

マルチフェロイック材料のフラックス法による単結晶育成と蛍光X線ホログラフィーを用いた局所構造解析

Y. Inoue *et al.*Single Crystal Growth with Flux Method and Local Structure Analysis around Fe Using X-ray Fluorescence Holography for Multiferroic $\text{Pb}(\text{Fe}_{1/2}\text{Ta}_{1/2})\text{O}_3$

Vol. 21, Iss. 4, pp. 278-283 (2023) (Regular Paper)

Regular

優れた電気化学的性能を備えたBi-Pr-O複合ナノフレークの合成



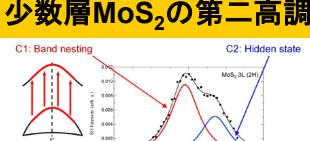
X. Wang, Z. Sun, J. Zhou, J. Huang, L. Pei

Synthesis of Bi-Pr-O Composite Nanoflakes with Good Electrochemical Performance

Vol. 21, Iss. 4, pp. 284-291 (2023) (Regular Paper)

Regular

explain perform whole use flex carry surfactant
tetragonal mm smooth reversible general proportional
observe systematic electrode modify pr. um poly
electrochemical catalyst PVP nanoflake pyridine
nanoflakes hexagonal assist hexagonal shape
vinyl satisfactory prepare display
mark lead find first structure

少数層MoS₂の第二高調波発生分光で観測されたC励起子の隠れた状態

Y. Hirata, S. Ohno, T. Suzuki, Y. Miyauchi

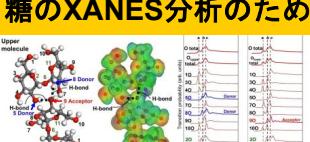
Hidden State at C Exciton Observed by Second-Harmonic Generation Spectroscopy of Few-layer MoS₂

Vol. 21, Iss. 4, pp. 292-299 (2023) (Regular Paper)

Regular

similar negligible broadens peak nest 3r excitation
contrast hidden mask c spectrum modified
photon component whole use flex carry surfactant
shift component observe general proportional
two linear gamma transition structure hexagonal shape
monolayer transition monolayer increase c1 red intensify
transition monolayer increase c1 red intensify

糖のXANES分析のためのスクロース分子の水素結合のDFT計算



K. Hiramatsu, K. Mae, Y. Muramatsu

DFT Calculations of Hydrogen Bonds in Sucrose Molecules for XANES Analysis of Sugars

Vol. 21, Iss. 4, pp. 300-304 (2023) (Regular Paper)

Regular

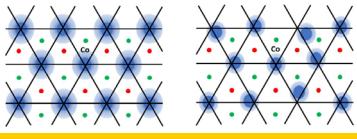
powerful high obtain molecular molecule absorption
sugar theory intermolecular interaction provide
intermolecular form xaneso investigate
spectrum confirme h edge atom k bond useful calculated
sugarcane suggest sucrose functional shift tool energy
intermolecular form xaneso investigate
spectrum confirme h edge atom k bond useful calculated
sugarcane suggest sucrose functional shift tool energy

蛍光X線ホログラフィーによる $\text{Fe}_{0.08}\text{Co}_{0.92}$ の局所構造の研究

Regular

Y. Fukui *et al.*Local Structures of $\text{Fe}_{0.08}\text{Co}_{0.92}$ Studied by X-ray Fluorescence Holography

Vol. 21, Iss. 4, pp. 305-309 (2023) (Regular Paper)



Change small fcc carry pack constant reconstruct particular
several high unlike thermal 100k 300k intensity vibration
clear proportional center crystal face image ray atomic close
amount dope hexagonal iron cobalt increase
distorted hcp xfh nm structure atomic close
metric atom visualize dimensional lattice suppression
atom visualizing dimensional temperature

グラフェンで被覆した球状多層ナノ粒子の日射吸収性能

Regular



Fitriyadi, A. Azwar, F. A. Noor

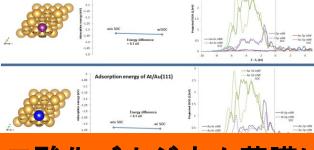
Solar Irradiance Absorption Performance of a Spherical Multilayered Nanoparticle Coated with Graphene

Vol. 21, Iss. 4, pp. 310-317 (2023) (Regular Paper)

dependent generate structure dielectric compare harden
exchange static au structure enhance show
reach dielectric reach choose
size irradiance size adsorption eventz
determine ag size reduce layer
high result apply radius dgm peak
nanowires meta performance maximum
nanowires add calculate very best permittivity

Au(111)表面へのヨウ素とアスタチンの吸着に関する理論的比較研究

Proceeding



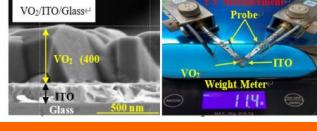
J. Tanudji, S. M. Aspera, H. Kasai

Theoretical Comparison Study of Iodine and Astatine Adsorption on Au(111) Surface

Vol. 21, Iss. 4, pp. 318-323 (2023) (Proceeding Paper)

covalent look spin upturn
radionuclides static center surface nanoparticles many
design exchange dielectric adsorption
improve reach size adsorption
mechanism adsorb au goldastatine bond
application adsorp find strength iodine learn
cubic quantify affect provide

二酸化バナジウム薄膜における電圧誘起スイッチング挙動と自己持続的電気振動の関係に関する研究



L. Hoque, Md. S. Mian, K. Okimura, T. Nakanishi

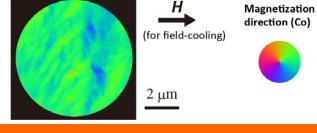
Study on Relation Between Voltage-induced Switching Behavior and Self-sustained Electrical Oscillations in Vanadium Dioxide Thin Films

Vol. 21, Iss. 4, pp. 324-330 (2023) (Proceeding Paper)

hysteresis large constraint
low present film exhibit suggest obtain teresis and sputtering
characteristics many
v prepare probe begin increase electric
oxidation v scale small vob find oscillation similar
force find strong sample sustain port sys mm
sample oscillate magnetron

光電子顕微鏡による FeMn/Co ヘテロ構造の交換バイアス効果の可視化

Proceeding

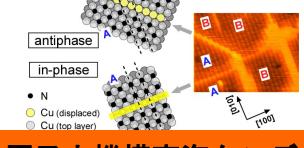
T. Ohkochi *et al.*Visualization of the Exchange Bias Effect in an FeMn/Co Heterostructure via Photoemission Electron Microscopy

Vol. 21, Iss. 4, pp. 331-336 (2023) (Proceeding Paper)

assume film co cooling external consisting
adjacent ray restore contradict align photoemission
field accord femtosecond
neighboring resources magnetization amfm flexibility
exchang structure xmd layer follow domain paramagnetic heat
temperature various

Cu(001)への窒素吸着：応力緩和のメカニズムと2つのドメインの共存

Proceeding



M. Yamada, K. Nakatsuji, F. Komori

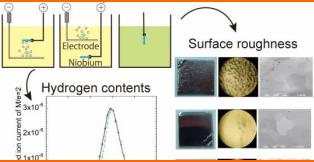
Nitrogen Adsorption on Cu(001): Mechanisms of Stress Relief and Coexistence of Two Domains

Vol. 21, Iss. 4, pp. 337-343 (2023) (Proceeding Paper)

microscopy possible specific touch like
show hard appear effective much
port equivalent diagonal surface
note propose monomer estimate adsorb cu induce
monolayer relief x feature base high two
model dark study absorb five phase observe
nitrogen grid follow align neling structural
mechanism

原子力機構東海タンデム加速器の超伝導QWRの性能回復のための研磨条件の違いによるニオブ表面粗さと水素含有量の検討

Proceeding

J. Kamiya *et al.*

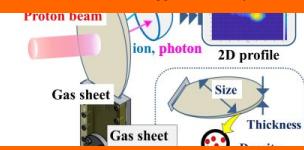
Investigation of Niobium Surface Roughness and Hydrogen Content with Different Polishing Conditions for Performance Recovery of Superconducting QWRs in JAEA Tokai-Tandem Accelerator

Vol. 21, Iss. 4, pp. 344-349 (2023) (Proceeding Paper)

important chemical superconducting linac booster
investigate different investigate result measure lined
condition appropriate amount qwr roughness
polishing pot thickness ep polishing
desorption arrangement actual avoid local surface obtain niobium base
smooth electrode content bubble find method
wave

ギャップ対幅比が非常に小さい長方形チャネルを通過する希薄ガス流：実験とDSMC計算

Proceeding



N. Ogiwara, Y. Hori, H. Yoshida, K. Arai

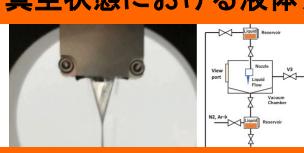
Rarefied Gas Flow through Long Rectangular Channel with Very Small Gap-to-Width Ratio: Experiments and DSMC Calculations

Vol. 21, Iss. 4, pp. 350-358 (2023) (Proceeding Paper)

measure achieve flow explore calculate pass efficient desired
compare method simulate use increase investigate
conductance vacuum
gap n2 molecule ion ck spatial occur
fast 2d dsme sheet channel lnk long small
desorption arrangement actual obtain niobium base
smooth electrode content bubble find method
wave

真空状態における液体ターゲットの特性評価

Proceeding



K. Yamamoto, N. Ogiwara, M. Kuramochi

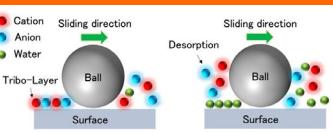
Characterization of Liquid Targets in Vacuum Condition

Vol. 21, Iss. 4, pp. 359-364 (2023) (Proceeding Paper)

mercury liquid vapor year select require sheet
stably investigate film recent
durable target power liquid
take confirm case accord ethanol vacuum
resource use
decrease c high mm width
rectangular mm width
accelerator
method

イオン液体の潤滑特性に及ぼす相対湿度の影響

Proceeding

S. Kawada *et al.*

Effects of Relative Humidity on Lubricating Properties of Ionic Liquids

Vol. 21, Iss. 4, pp. 365-372 (2023) (Proceeding Paper)

diacyanamide double wear relative metallic
interact affect elucidate friction liquid waterhydrophobic
cofactors adsorption bimim uteate
use use rph layer property good
lubrication low best dnm dertive hydrophilic
mechanism mechanism