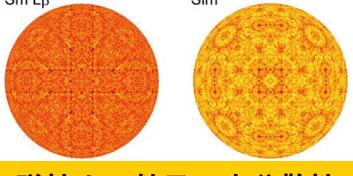


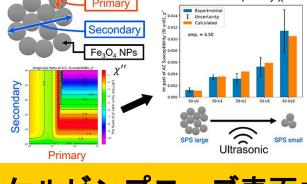
X線蛍光ホログラフィーによるSmドープYbB<sub>6</sub>の局所原子構造の研究

Y. Kobayashi, K. Ohoyama, S. Uechi, K. Kimura, N. Hoppo, F. Iga, K. Hayashi  
**Study of Local Atomic Structures of Sm Doped YbB<sub>6</sub> Observed by X-ray Fluorescence Holography**  
Vol. 23, Iss. 2, pp. 92-96 (2025) (Regular Paper)

Regular

 inten... strong trivalen... lattice network  
fluores... push good ray cause  
maintain dimensio... bond  
determin... doping imply covalent cage differen...  
affect covalent distance atom...  
distance holecrap three first nn  
covalent boron sm shift ionic yb fluctuat...  
shift find perform suggest agree...  
boron approxim... result particula... experime...  
approxim... particula...  
find result parti... experime...

## 磁性ナノ粒子の水分散性の改善と磁気緩和への影響



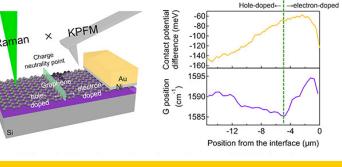
S. Watanabe, R. Yano, H. Amano, R. Abe, Y. Kusumoto, M. Hasegawa, Y. Ichiyanagi

**Improvement of Water Dispersion of Magnetic Nanoparticles and Their Effect on Magnetic Relaxation**  
Vol. 23, Iss. 2, pp. 97-107 (2025) (Regular Paper)

Regular

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investig... experime... treatmen... understa... brownian proporti...  
consider... essenti... coating understa... magnetic sps hydron...  
primary design... aggregat... particlenanopart...  
design... sider disting... time study relaxati... reveal optim...  
secondary... core expose estimat... size represen... several model  
exposure estima... size represent... several model  
signific... ultras... silica effectiv... imaging  
signific... volume ultras... critical orthosilic...

## ケルビンプローブ表面力顕微鏡およびラマン分光による单層グラフェンの金属誘起仕事関数変調の評価



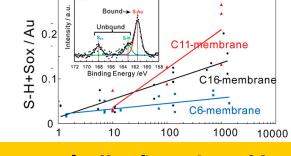
M. Okada, T. Yamada, Y. Okigawa

**Metal-induced Work Function Modulation of Single-layer Graphene Characterized by Kelvin Probe Force Microscopy and Raman Spectroscopy**  
Vol. 23, Iss. 2, pp. 108-112 (2025) (Regular Paper)

Regular

 low exhibit observe speculat... depend  
utilize form kpfm optimiz... find use  
dimensio... performa... metal device junction  
form photovol... correspo... 2d nigraphene base  
evaluate evaluat... contact interfac... semicond...  
schottky persist arise emphasi... ideal  
work raman reliable height high  
work raman reliable arise emphasi... ideal  
work raman reliable aris... ideal material

## アミノアルカンチオール分子が形成する自己組織化单分子膜中に含まれる未結合分子の分析



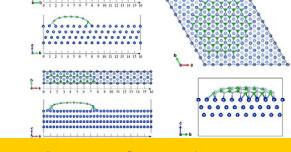
Y. Takaoka, H. Omori, H. Sakaue, H. Suzuki

**Analysis of Unbound Molecules Contained in Self-assembled Monolayer Membrane Formed by Amino-alkanethiol Molecules**  
Vol. 23, Iss. 2, pp. 113-118 (2025) (Regular Paper)

Regular

 solution spectros... onde... photoele... photole... ratio self  
amide remov... sulfur ph... form group pure consiste...  
allyl assembl... combl... monolay... alky...  
surface chain induc... contain amino membran...  
alkaneth... use oxidiz... analyze rins... tuffer  
alcaneth... useful modif... modify rins... lengt...

## CVD初期成長中に核形成されるCu(111)上の固有hBNアイランドの第一原理研究



R. Imamura, I. Seo, H. Kageshima

**First-principles Study of Intrinsic hBN Island Nucleated During CVD Initial Growth on Cu(111)**  
Vol. 23, Iss. 2, pp. 119-131 (2025) (Regular Paper)

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 provide... inuer... initial stable essential...  
growing enable... investig... intrinsi... reveal single  
observe propose size triangul... cu maintain  
edge cvd edge zigzag island potentia...  
density dimensio... chemcial... critical hbn two  
nitrogen high shape hexagona... potentia... stabili...  
calculated... range citric compund... luminesc... like  
shape carbon wide pink color hybridiz... purple  
hexagon... carbo... eu... evaluate blue color expect  
nitride predict function boron

## 炭素化合物と複合化した発光性ハイドロキシアパタイトナノ粒子の有機酸誘導合成：発光色制御への新たなアプローチ



W. Shi, D. Noda, J. Chandra, M. Tagaya

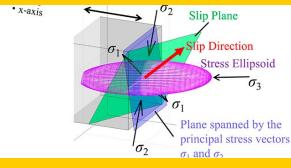
**Organic Acid-driven Synthesis of Photoluminescent Hydroxyapatite Nanoparticles Hybridized with Carbon Compounds: A Novel Approach to Emission Color Control**

Vol. 23, Iss. 2, pp. 132-137 (2025) (Regular Paper)

Regular

 temperat... photolum... control non emission increase bioimagi...  
graphene change occur carboniz... photolum... internal photos...  
high red dope treatmen... nanopart... realize ion ac... lead  
show tunntun show thermal emit  
form citric compund... luminesc... like  
range synthesi... i wide pink color hybridiz... possible  
cystine carbon eu... evaluate blue exhibit expect  
material result intermol...

## 機能性鉄ーガリウム单結晶合金における残留応力と微細構造の特性評価



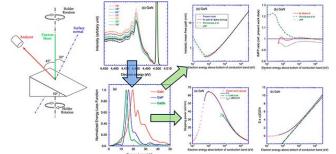
S. Suzuki, M. Chiba, T. Tanno, S. Hashi, K. Ishiyama

**Characterization of Residual Stress and Microstructure in a Functional Iron-Gallium Single Crystal Alloy**  
Vol. 23, Iss. 2, pp. 138-142 (2025) (Regular Paper)

Regular

 residual directio... shrinkag... xrd principa... microstr...  
perform result s... indicate residual form ebso principa... subject  
polycrys... deform... show stress alloy  
correlat... use edm... evalute stress alloy  
correlat... tensile surface single scan correp...  
valuab... use edm... slip layer deformat... diffract... like large  
fracture crastal... com... compress... measure polycrys...  
increas... microstr... sem...  

## 角度分解電子エネルギー損失分光法と因子分析によるGaN, GaP, GaSbのエネルギー損失関数の決定：電子輸送パラメータ計算への応用



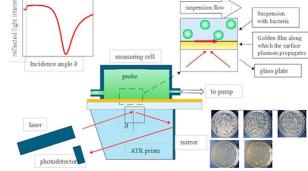
H. Tanaka, H. Shinotsuka, H. Yoshikawa, S. Tanuma

**Determination of Energy Loss Functions for GaN, GaP, and GaSb by Angle-resolved Electron Energy Loss Spectroscopy with Factor Analysis: Applications to Electron Transport Parameter Calculations**  
Vol. 23, Iss. 2, pp. 143-159 (2025) (Regular Paper)

Regular

 anal... wid... modif... imagin... impf electron gap propose chem...  
paramet... critica... mean bethe sp loss... obtain...  
critica... mean derivat... fit value... gab... less reprodu... gan...  
paramet... critica... mean derivat... fit value... gab... less reprodu... gan...  
paramet... critica... mean derivat... fit value... gab... less reprodu... gan...  
paramet... critica... mean derivat... fit value... gab... less reprodu... gan...  
paramet... critica... mean derivat... fit value... gab... less reprodu... gan...

## ナノ構造金表面の抗菌効果に対する表面プラズモン共鳴の影響



V. Lozovski, N. Rybalchenko, I. Petrik, K. Kryvokhyzha,

A. Vasiljev, T. Vasyliev

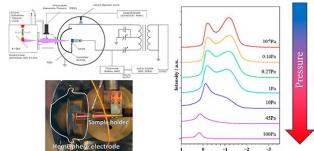
### Surface Plasmon Resonance Influence on the Antibacterial Effect of a Nanostructured Gold Surface

Vol. 23, Iss. 2, pp. 160-167 (2025) (Regular Paper)

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gravi... experim... theory increase...  
action present... answer reserve conditio... increase  
deal settle theor... enhancem... sample consider reliabil...  
gold bacteria... circulat... lead sp local resonanc... field  
circular... circulat... lead sp local resonanc... field  
enhancem... sample consider reliabil... aureus ponderom...  
gold antibact... experim... use bacteria... force membrane  
increase... double suspensi... identica... primary take...  
plasmon nanostru... result interact...

## 古典的なリターディング・フィールド分析器を用いた中真空中の固体からの低エネルギー光電子の測定のための分光法



R. Ozaki, M. Ohara, M. Tateno, H. Ishii

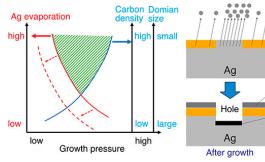
### Spectroscopic Methods to Measure Low-energy Photoelectron from Solids in Medium Vacuum Using a Classic Retarding Field Analyzer

Vol. 23, Iss. 2, pp. 168-173 (2025) (Regular Paper)

Regular

oriented electron... differen... ups spectrum find ultrahigh...  
dissoci... medium nap rfa obtain pressure improve  
varying c60 measure enable yield mes... spectrum  
semicond... catalyti... practica... use spectros... energy rob...  
demonstr... focus use spectros... survey ambient...  
feasible photoele... pe conditio... influenc... electric...  
classic kineti... state atmosph... la... powerful pumping affordab...  
dynamic synchrot... device apparatu... material frequen... constant...  
graphite

## エタノールを用いた化学気相成長法による銀箔上へのグラフェン合成



H. Iwatani, F. Maeda

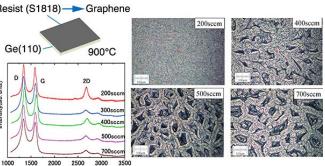
### Graphene Synthesis on Silver Foil by Chemical Vapor Deposition Using Ethanol

Vol. 23, Iss. 2, pp. 174-181 (2025) (Regular Paper)

Regular

spectros... raman indicate base continuo... require deposit...  
various limit modifica... surface process sample valid  
investig... compre... environm... growth conditio...  
demonstr... obtain high ethanol atom evaporat... silver decompos...  
investig... obtain high ethanol atom evaporat... silver substrat...  
chemical low cooling propose expand include analysis  
gas improve suppress... determin... hydrogen

## フォトレジストを固体炭素源として用いたGe(110)上へのグラフェン成長



R. Takeda, F. Maeda

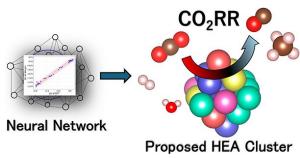
### Graphene Growth on Ge(110) Using a Photoresist as a Solid Carbon Source

Vol. 23, Iss. 2, pp. 182-187 (2025) (Regular Paper)

Regular

roughnes... surface flow thin various suppress... limit acetate  
solidinvestig... h2 eludicat... ambient drastic  
crystall... amount gas observe use grow suitable improve  
transpor... mass ar minsubstrat... material quality  
result dilute solvent exhibit examine acetone addition  
temperat... optimal photores... large hydrogen

## 合金クラスター触媒の探索に向けた機械学習ポテンシャルの構築



K. Miyamoto, K. Shimizu, A. K. A. Lu, S. Watanabe

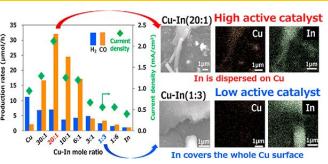
### Construction of Machine Learning Potentials toward the Exploration of Alloy Cluster Catalysts

Vol. 23, Iss. 2, pp. 188-192 (2025) (Regular Paper)

Regular

size calculat... excellen... difficult... function...model... study... model...  
potentia... machine... shape base... develop... structur... structur...  
co h slab... base... configur... expect... show... show...  
theory density... elucidat... field... field... field...  
element total... make... huge... adsorpt... catalyst...  
make temperat... optimal... entropy... adsorpt... composit... number

## 電気化学的CO<sub>2</sub>還元用ガス拡散電極におけるCu-In触媒の構造と化学状態の解析



M. Yamamoto, S. Mizoguchi, T. Tanabe, T. Yoshida

### Structural and Chemical State Analyses of Cu-In Catalysts

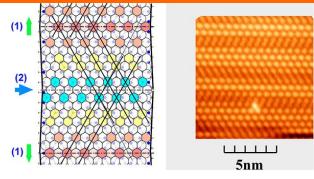
on Gas Diffusion Electrodes for Electrochemical CO<sub>2</sub> Reduction

Vol. 23, Iss. 2, pp. 193-198 (2025) (Regular Paper)

Regular

surfac... single reveal low key conduct give product...  
fine dispersi... voltage current electro... photole... high good co... spectra... change x  
mole co2 ratio activ... reaction ray latter... later... farad... reductio... diffusi...  
ratio activ... cataly... segregat... play absor...  
catalyst former... electro... morpholo... efficien... observat...  
segregat... play absor... micresco...  
catalyst former... electro... morpholo... efficien... observat...

## Si(111)上のPb吸着により形成されるストライプ非整合相の簡易モデル



M. Yamada, Y. Sato, M. Haze, Y. Hasegawa

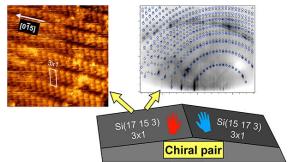
### Simple Model for Striped-incommensurate Phase Formed by Pb Adsorption on Si(111)

Vol. 23, Iss. 2, pp. 199-206 (2025) (Proceeding Paper)

Proceeding

resultan... report form like striped apply tunnell... stress site base simple  
like unit propose strip layer feature ball stable paper  
observe occupi... modifi... slight incomm... perfect arrangem... coverage  
occupi... modifi... slight incomm... perfect arrangem... coverage  
like unit propose strip layer feature ball stable paper  
perfect arrangem... coverage difficult... sic lead requir... family expand... lead compress... require twin subseqe... account

## 安定なキラルSi表面: Si(17 15 3) 3 × 1



H. Telengut, B. Li, K. Haga, T. Abukawa

### Stable Chiral Si Surface: Si(17 15 3) 3 × 1

Vol. 23, Iss. 2, pp. 207-212 (2025) (Proceeding Paper)

Proceeding

elast... determin... stable heat heat periodic...  
know concide surface infer rheod converg... nano run spacing consti... novel  
show substrat... chiral si parallel form electro... structur... faceted plane... random... reflect...  
tunnell... arran... ultrahig... groove flash image...  
electro... structur... faceted alternat... homo promisin... super  
rheod... alternat... homo promisin... super