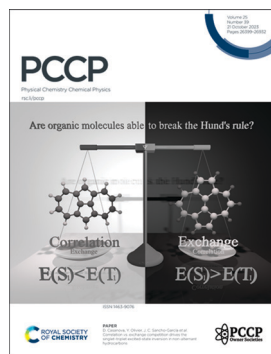


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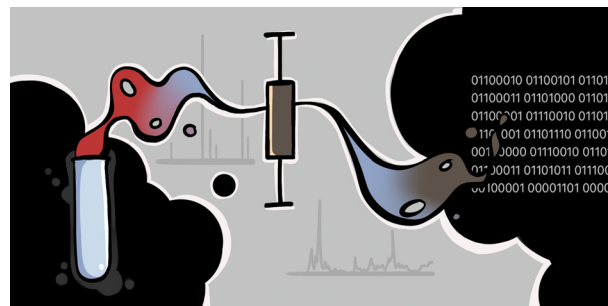
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Benchmark experiments for numerical quantum chemistry

Ricardo A. Mata, Anne Zehnacker-Rentien and Martin A. Suhm

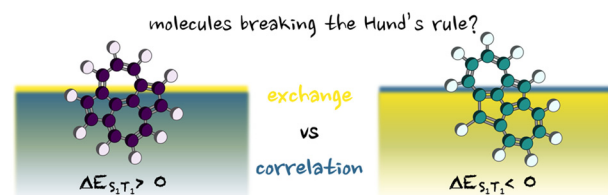


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Correlation vs. exchange competition drives the singlet–triplet excited-state inversion in non-alternant hydrocarbons

M. E. Sandoval-Salinas, G. Ricci, A. J. Pérez-Jiménez, D. Casanova,* Y. Olivier* and J. C. Sancho-García*



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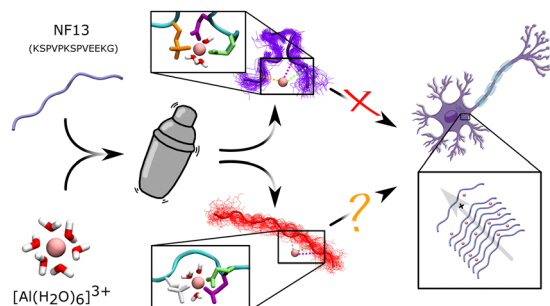


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Influence of metal binding on the conformational landscape of neurofilament peptides

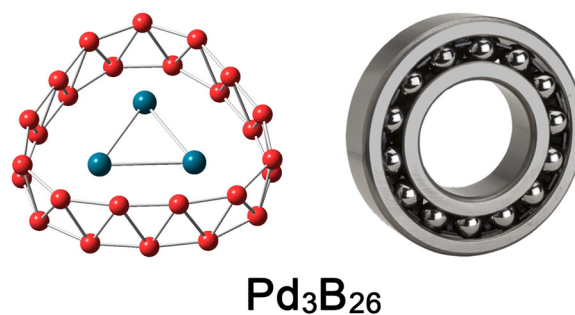
David Silva-Brea, David de Sancho* and Xabier Lopez*



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Boron-based Pd₃B₂₆ alloy cluster as a nanoscale antifriction bearing system: tubular core-shell structure, double π/σ aromaticity, and dynamic structural fluxionality

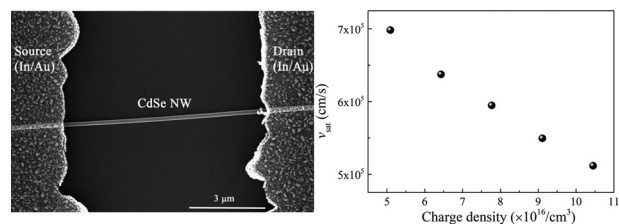
Lin-Yan Feng, Jin-Chang Guo, Ying-Jin Wang, Xiao-Ying Zhang and Hua-Jin Zhai*



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Drift velocity saturation in field-effect transistors based on single CdSe nanowires

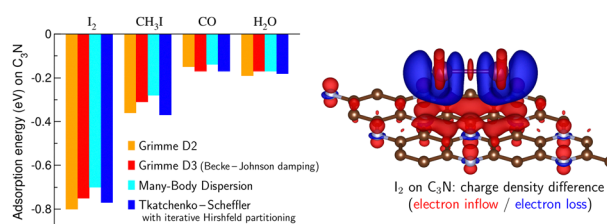
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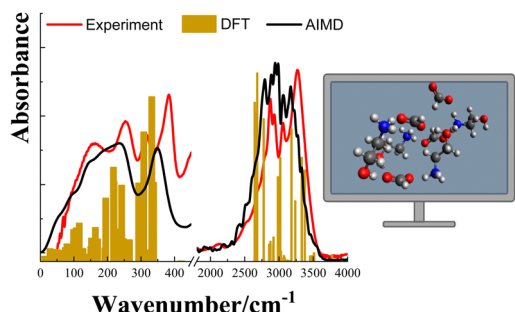
Potential of nanostructured carbon materials for iodine detection in realistic environments revealed by first-principles calculations

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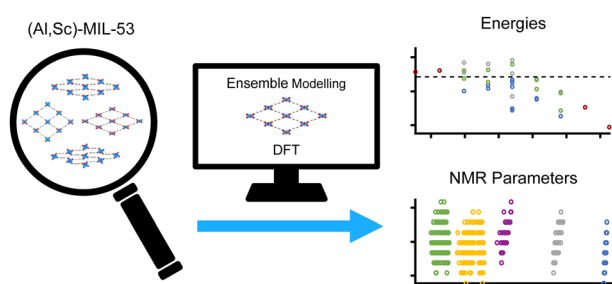
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DFT and *ab initio* molecular dynamics simulation study of the infrared spectrum of the protic ionic liquid 2-hydroxyethylammonium formate

Vitor Hugo Paschoal and Mauro C. C. Ribeiro*

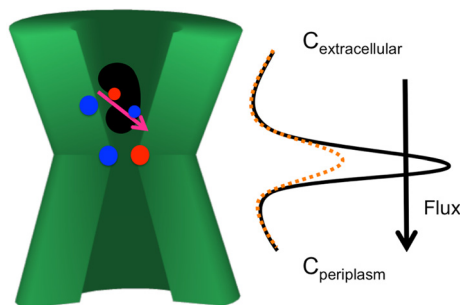
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Computational NMR investigation of mixed-metal (Al,Sc)-MIL-53 and its phase transitions

Zachary H. Davis, Emma A. L. Borthwick, Russell E. Morris* and Sharon E. Ashbrook*

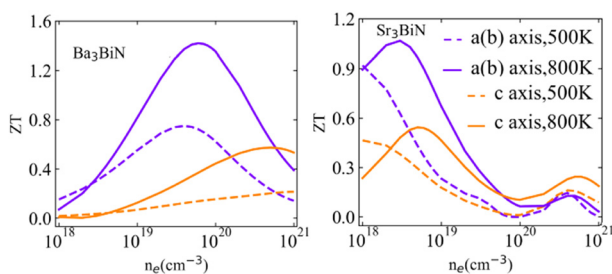
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The mechanism of an electrostatic nanofilter: overcoming entropy with electrostatics

Igor Bodrenko, Matteo Ceccarelli* and Silvia Acosta-Gutierrez

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Low lattice thermal conductivities and good thermoelectric performance of hexagonal antiperovskites X(Ba & Sr)₃BiN with quartic anharmonicity

Shuming Zeng,* Xiang Yan, Qian Shen, Yusong Tu, Hao Huang* and Geng Li*

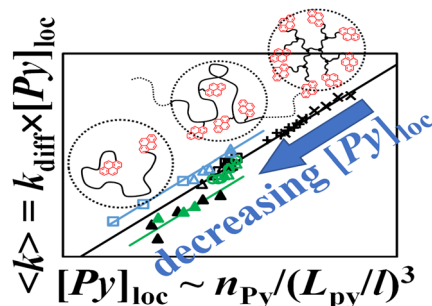


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Probing the inner local density of complex macromolecules by pyrene excimer formation

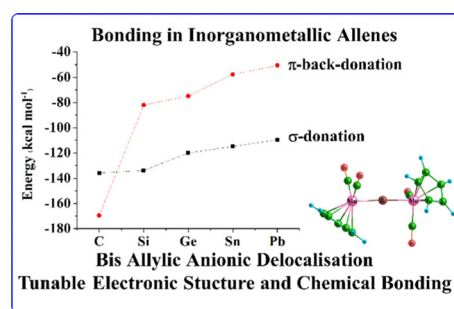
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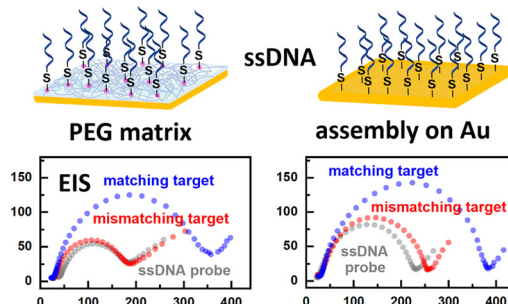
Parameswaran Parvathy and Pattiyil Parameswaran*



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Exploiting epoxy-rich poly(ethylene glycol) films for highly selective ssDNA sensing via electrochemical impedance spectroscopy

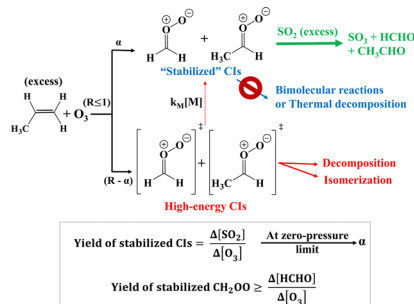
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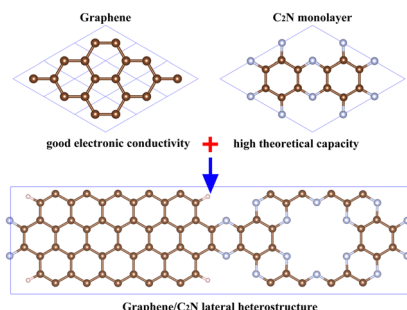
Low-pressure and nascent yields of stabilized Criegee intermediates CH_2OO and CH_3CHOO in ozonolysis of propene

Lei Yang, Mixtli Campos-Pineda, Katia Hatem and Jingsong Zhang*



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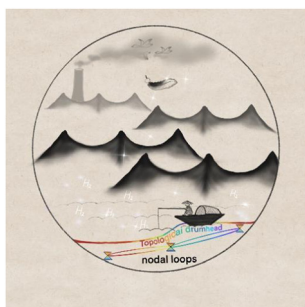
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Graphene/C₂N lateral heterostructures as promising anode materials for lithium-ion batteries

Yawen Chen, Qianru Wang, Quan Zhang, Shengli Zhang and Yang Zhang*

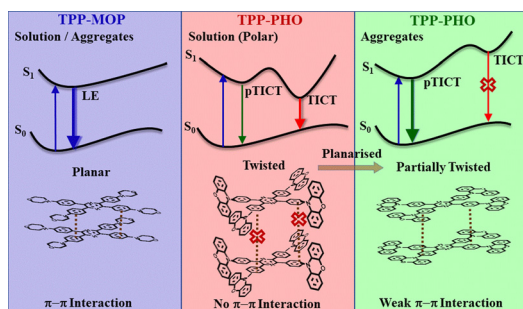
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Drumhead surface states promoted hydrogen evolution reactions in type-II nodal-line topological catalyst Mg₃Bi₂

Min Zhao, Weizhen Meng,* Lirong Wang, Zeqing He, Lei Jin, Ying Liu, Xuefang Dai, Xiaoming Zhang,* Hongshi Li* and Guodong Liu*

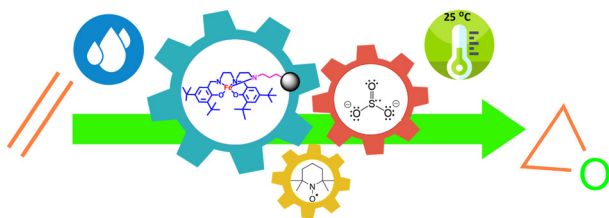
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Molecular torsion controls the excited state relaxation pathways of multibranched tetraphenylpyrazines: effect of substitution of morpholine vs. phenoxazine

Hasim Fayiz Pananilath, Chinju Govind, Tessy D. Thadathilanickal and Venugopal Karunakaran*

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TEMPO and a co-reductant mediated aerobic epoxidation of olefins using a new magnetically recoverable iron(III) bis(phenol)diamine complex: experimental and computational studies

Pegah Mohammadpour, Elham Safaei,* Elham Mazarei and Constantinos D. Zeinalipour-Yazdi

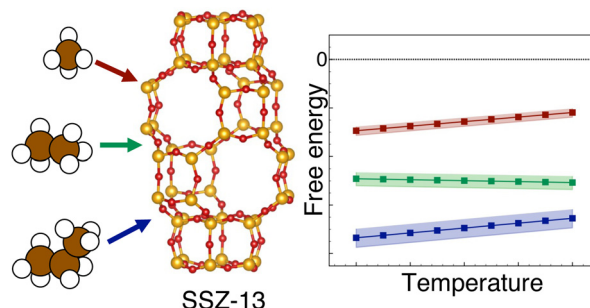


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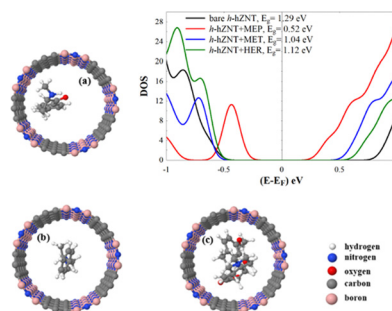
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Towards nanotube-based sensors for discrimination of drug molecules

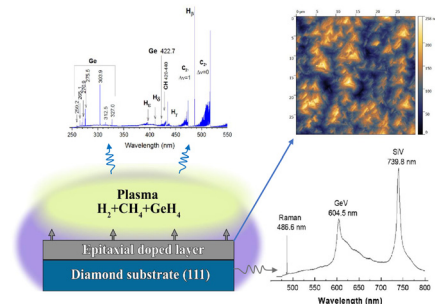
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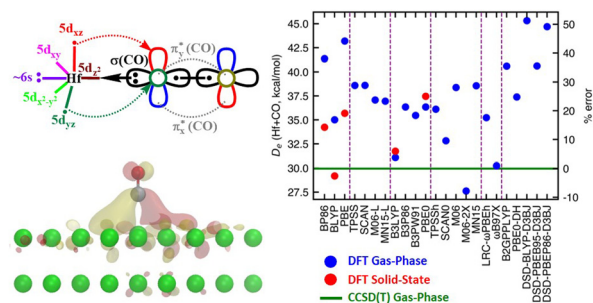
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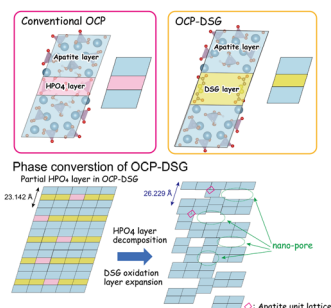
Gas-phase and solid-state electronic structure analysis and DFT benchmarking of HfCO

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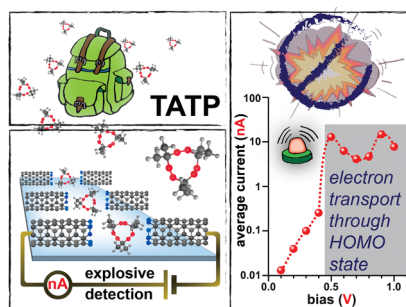
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Interlayer expansion of octacalcium phosphate via forced oxidation of the intercalated molecules within its interlayers

Yuki Sugiura,* Etsuko Yamada and Masanori Horie

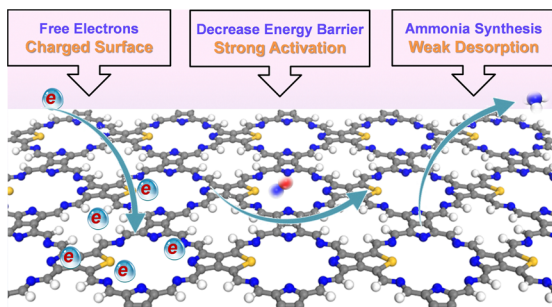
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Tunnel junction sensing of TATP explosive at the single-molecule level

Aleksandar Ž. Tomović, Helena Miljkovic, Miloš S. Dražić, Vladimir P. Jovanović and Radomir Zikic*

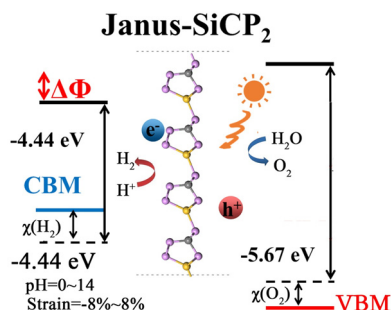
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Theoretical insight into the essential role of charged surface for ammonia synthesis: Si-decorated carbon nitride electrode

Lei Yang, Jiake Fan and Weihua Zhu*

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Metal-free Janus α - and β -SiCP₄: designing stable and efficient two-dimensional semiconductors for water splitting

Yanfu Zhao, Bofeng Zhang* and Jiahe Lin*

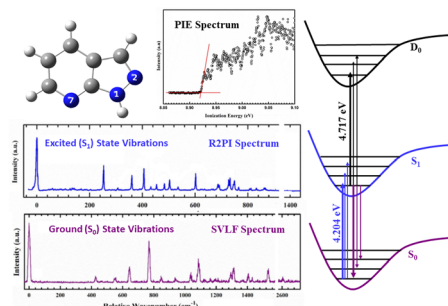


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Laser spectroscopic characterization of supersonic jet cooled 2,7-diazaindole

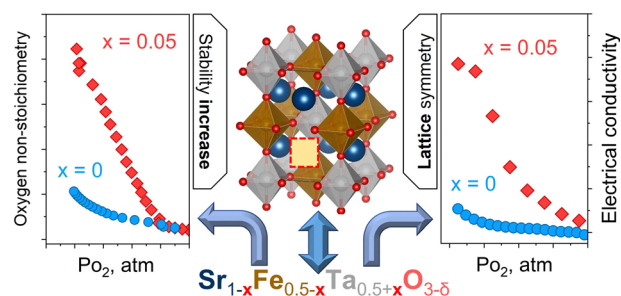
Simran Baweja, Bhavika Kalal and Surajit Maity*



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The influence of strontium deficiency on thermodynamics of defect formation, structural stability and electrical transport of $\text{SrFe}_{0.5}\text{Ta}_{0.5}\text{O}_{3-\delta}$ -based solid solutions with an excess tantalum content

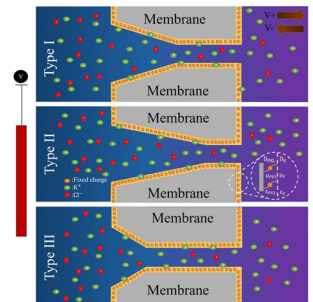
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Smart nanochannels: tailoring ion transport properties through variation in nanochannel geometry

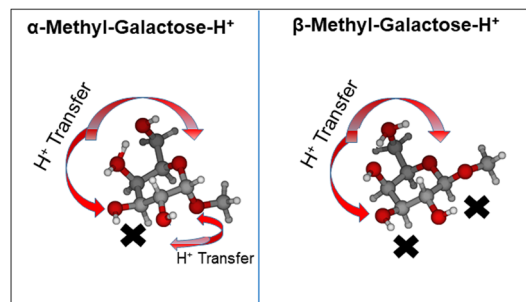
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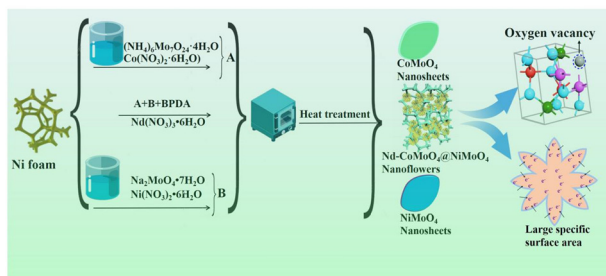
Selective reactivity of glycosyl cation stereoisomers: the role of intramolecular hydrogen bonding

M. P. Dvores,* P. Çarçabal and R. B. Gerber*



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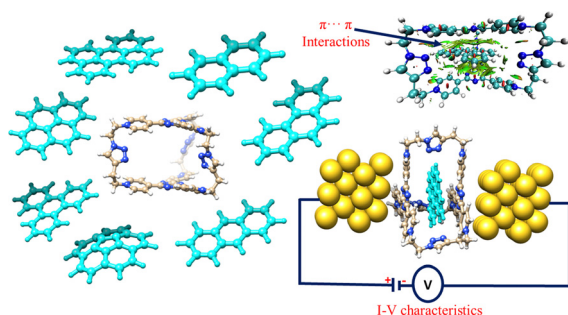
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Coupling of Nd doping and oxygen-rich vacancy in CoMoO₄@NiMoO₄ nanoflowers toward advanced supercapacitors and photocatalytic degradation

Jing Wang,* Gang Wang, Shen Wang, Tingting Hao and Jian Hao

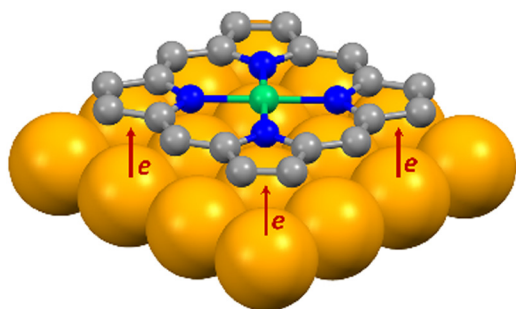
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Exploring π - π interactions and electron transport in complexes involving a hexacationic host and PAH guest: a promising avenue for molecular devices

Haobam Kisan Singh, Upasana Nath, Niharika Keot and Manabendra Sarma*

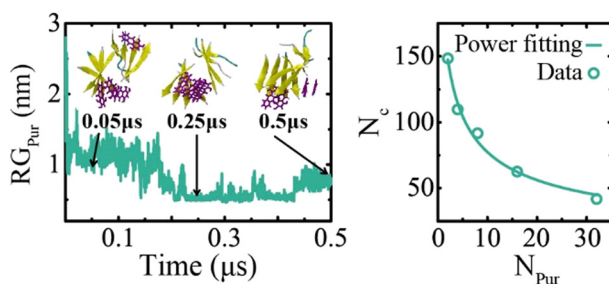
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A local point of view of the Cu(100) \rightarrow NiTPP charge transfer at the NiTPP/Cu(100) interface

Silvia Carlotto, Alberto Verdini,* Giovanni Zamborlini, Iulia Cojocariu, Vitaliy Feyer, Luca Floreano and Maurizio Casarin*

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Dose-dependent binding behavior of anthraquinone derivative purpurin interacting with tau-derived peptide protofibril

Xiaoxiao Wu, Lili Zhu, Gang Wang, Qingwen Zhang and Zhenyu Qian*

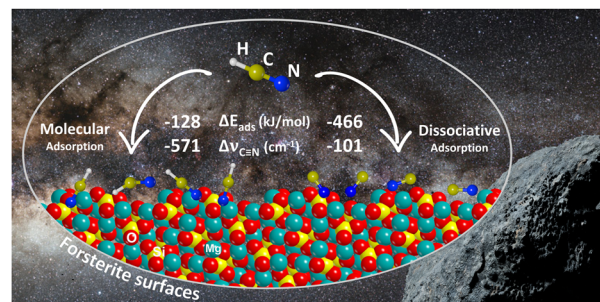


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Adsorption of HCN on cosmic silicates: a periodic quantum mechanical study

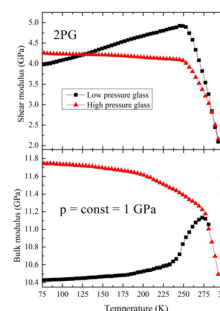
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Thermobaric history as a tool to govern properties of glasses: case of dipropylene glycol

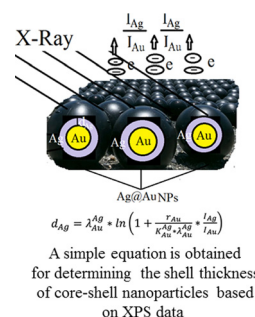
Igor Danilov,* Elena Gromnitskaya and Vadim Brazhkin



26820

A simple equation to determine the shell thicknesses of core-shell nanoparticles based on XPS data of their elemental composition

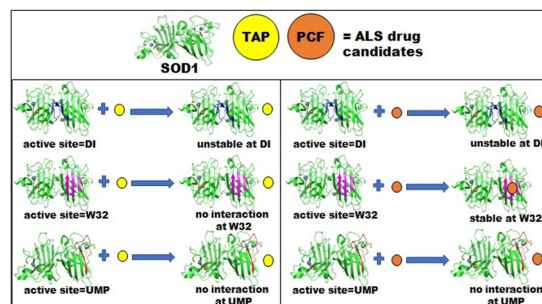
Alexey T. Kozakov,* Anton A. Skriabin and Niranjana Kumar



26833

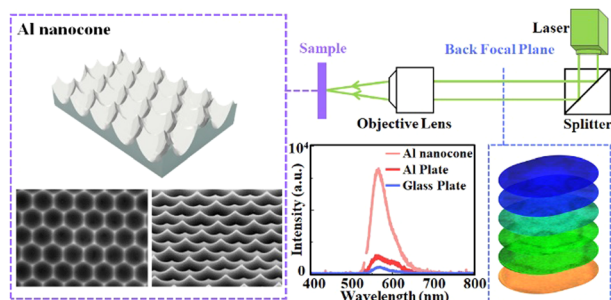
In silico analysis of SOD1 aggregation inhibition modes of tertiary amine pyrazolone and pyrano coumarin ferulate as ALS drug candidates

Aziza Rahman, Bondeepa Saikia and Anupaul Baruah*



RESEARCH PAPERS

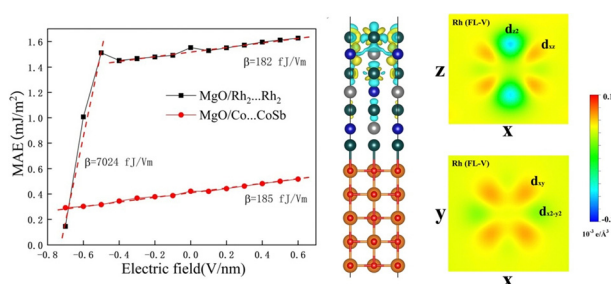
26847



Surface lattice resonances enhanced directional amplified spontaneous emission on plasmonic honeycomb nanocone array

Dongda Wu, Yi Wang,* Jiamin Xiao, Jiang Hu, Xuchao Zhao, Yuhao Gao, Jiazhi Yuan and Wenxin Wang*

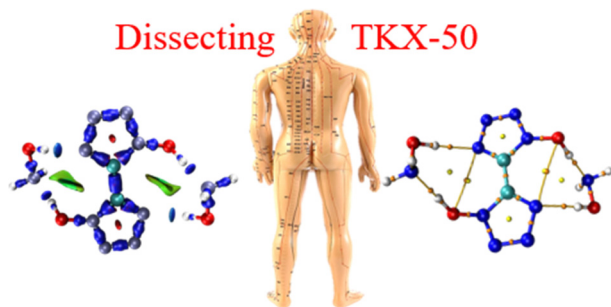
26853



Giant unilateral electric-field control of magnetic anisotropy in MgO/Rh₂CoSb heterojunctions

Shiming Yan, Yue Hu, Deyou Jin, Ru Bai, Wen Qiao* and Tiejun Zhou*

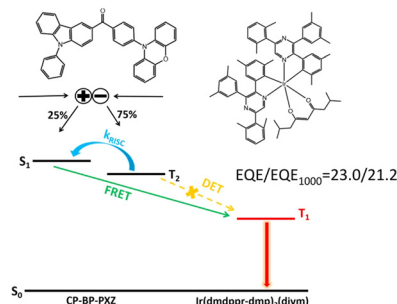
26861



Theoretical study on intra-molecule interactions in TKX-50

Chunhai Yang,* Xue Li,* Ning Zhou, Huilong Dong,* Xiuli Hu, Junxun Jin, Tao Huang and Jinhui Wang

26878



Exciton dynamics of an aggregation-induced delayed fluorescence emitter in non-doped OLEDs and its application as host for high-efficiency red phosphorescent OLEDs

Hanlin Li, Chengwei Lin, Yibing Wu, Xianfeng Qiao, Dezhi Yang, Yanfeng Dai, Qian Sun, Tansir Ahamad, Zhuji Zhao* and Dongge Ma*

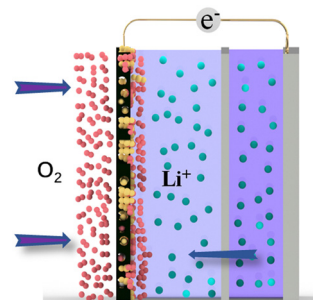


RESEARCH PAPERS

26885

Cobalt-doped tin disulfide catalysts for high-capacity lithium–air batteries with high lifetime

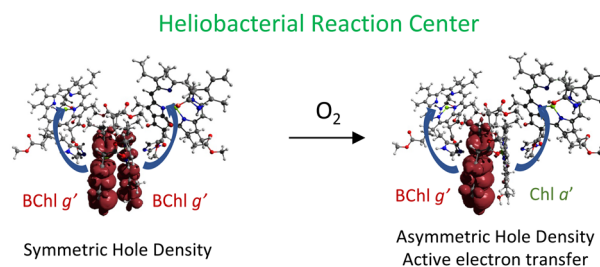
Jie Li, Yuzhi Shi, Junhai Wang, Qianhe Liu, Lihua Luan, Qiang Li, Qinghao Cao, Tianyu Zhang and Hong Sun*



26894

Electronic structure and energetics of a heterodimeric BChl *g'*/Chl *a'* special pair generated by exposure of *Heliomicrobium modesticaldum* to dioxygen

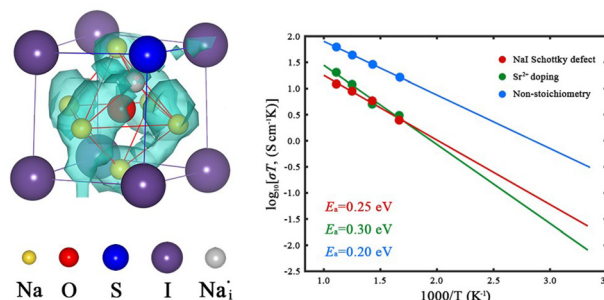
Divya Kaur,* Bryan Ferlez, Patrick Landry, Till Biskup, Stefan Weber, John H. Golbeck,* K. V. Lakshmi* and Art van der Est*



26906

Investigation of the sodium-ion transport mechanism and elastic properties of double anti-perovskite $\text{Na}_3\text{S}_{0.5}\text{O}_{0.5}\text{I}$

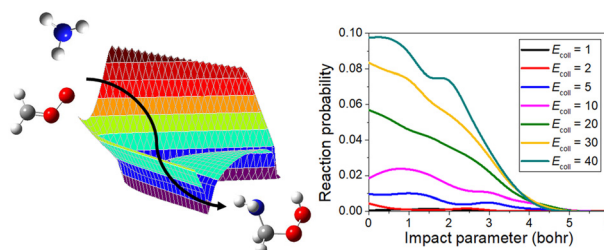
Sen Lian, Congcong Li, Chen Kang, Junfeng Ren and Meina Chen*



26917

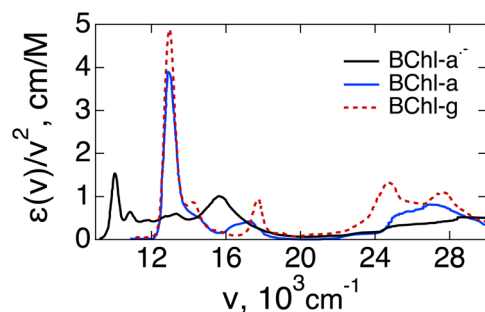
Full-dimensional automated potential energy surface development and detailed dynamics for the $\text{CH}_2\text{OO} + \text{NH}_3$ reaction

Cangtao Yin* and Gábor Czako*



COMMENT

26923



Comment on “Applicability of perturbed matrix method for charge transfer studies at bio/metallic interfaces: a case of azurin” by O. Kontkanen, D. Biriukov and Z. Futera, *Phys. Chem. Chem. Phys.*, 2023, 25, 12479

Setare Mostajabi Sarhangi and Dmitry V. Matyushov*

CORRECTION

26929

Correction: Induced UV photon sensing properties in narrow bandgap CdTe quantum dots through controlling hot electron dynamics

Thankappan Thrupthika, Devaraj Nataraj,* Subramaniam Ramya, Arumugam Sangeetha and T. Daniel Thangadurai

