

Dalton Transactions

An international journal of inorganic chemistry incorporating Acta Chemica Scandinavica
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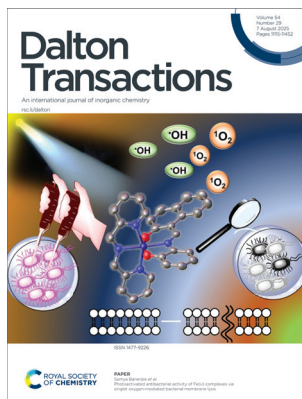
ISSN 1477-9226 CODEN DTARAF 54(29) 11115–11452 (2025)



Cover

See Fei Wang and Huihui Chen, pp. 11162–11173.

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Inside cover

See Samya Banerjee et al., pp. 11174–11181.

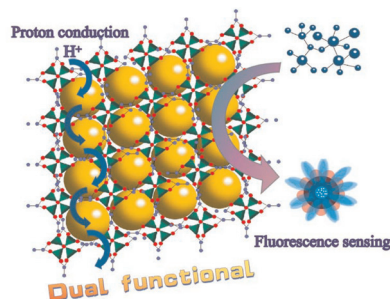
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PERSPECTIVE

11126

Bifunctional MOFs possessing both proton conductivity and fluorescence detection capabilities

Yining Zhang, Xuebin Shang, Zhiyang Qi, Penglin Zhang, Chenxi Zhang* and Qinglun Wang*

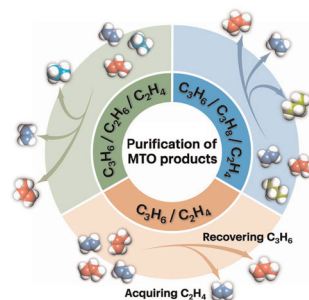


FRONTIER

11141

Metal–organic frameworks for purification of methanol-to-olefin (MTO) products

Baobing Tang, Xueyue Yu and Yunling Liu*



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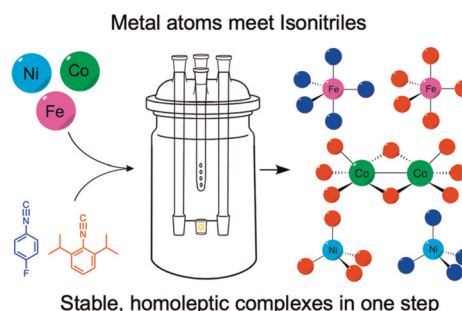
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COMMUNICATIONS

11150

Metal atom chemistry as a direct pathway to access homoleptic mono- and dinuclear isonitrile compounds of the iron triad Fe, Co, and Ni

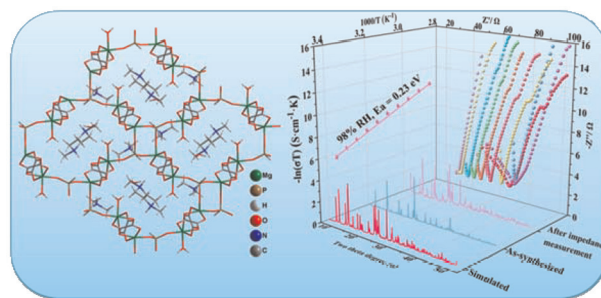
Johannes M. Emmert, Jörg Rust, Christian W. Lehmann and Jörg J. Schneider*



11156

A magnesium phosphite-oxalate with 16-MR channels showing ultrahigh proton conductivity

Xin Shao, Xin Wang, Wei Zhao, Liangliang Huang* and Yanfeng Bi*

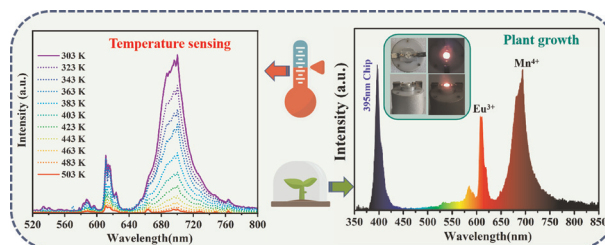


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Synergistic luminescent thermometer and indoor plant growth lighting utilizing the $\text{Mg}_2\text{LaSbO}_6\text{:Eu}^{3+}/\text{Mn}^{4+}$ phosphor

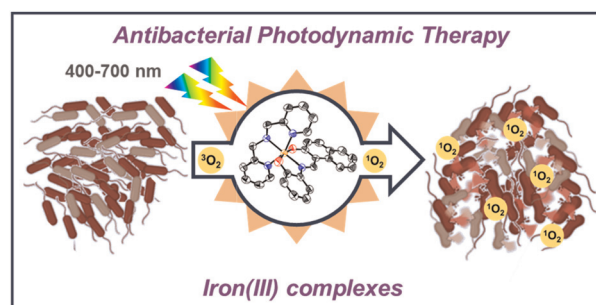
Fei Wang* and Huihui Chen



11174

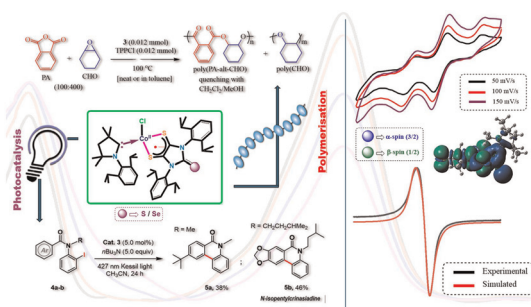
Photoactivated antibacterial activity of Fe(III) complexes via singlet oxygen-mediated bacterial membrane lysis

Ishwar Singh, Rohit Rai, Rajesh Kushwaha, Prodyut Dhar* and Samya Banerjee*



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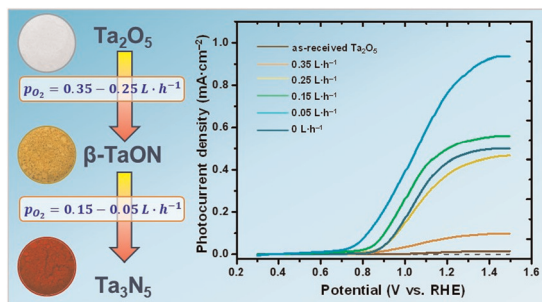
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Isolation and characterization of carbene-supported air stable Co(II)-radical complexes with bidentate redox non-innocent ligands: stability, bonding, ring-opening copolymerization studies and photo-catalytic ring cyclization activity

Sujit Das, Sangita Mondal, Sonam Suthar, Ranay Kumar Ray, Karunamayee Mondal, Avany A. Raveendran, Subuhan Ahamed, Chandan Maji, Mahiuddin Baidya,* Björn Schwarz,* Debashis Chakraborty,* Liviu Ungur* and Kartik Chandra Mondal*

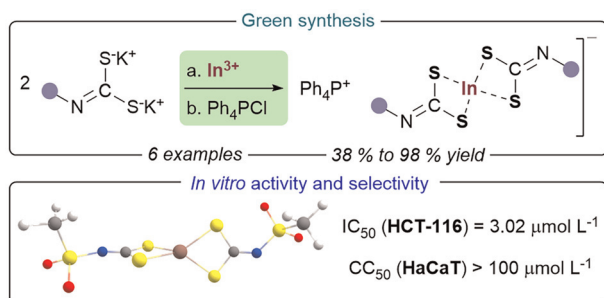
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Selective synthesis of β-TaON: The critical influence of oxygen partial pressure in ammonolysis

Mirabbos Hojamberdiev,* Ronald Vargas, Lorean Madriz, Dilshod Nematov, Ulugbek Shaislamov, Hajime Wagata, Yuta Kubota, Kunio Yubuta, Katsuya Teshima and Nobuhiro Matsushita

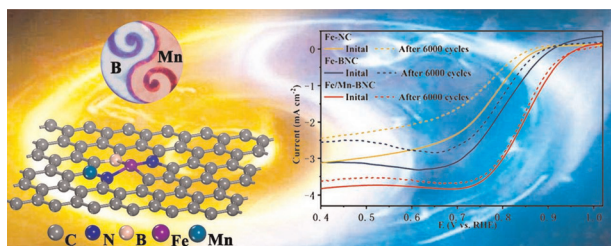
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In(III) complexes of sulfonyldithiocarbimates as selective antineoplastic agents against human colorectal adenocarcinoma

Lucas Raposo Carvalho,* Aline de Souza Bozzi,* Wanessa Maria Alves Faria, Lucas Gil Venturelli, Túlio Duque Esteves, Sâmia Sousa Duarte, Ramon Ramos Marques de Souza, Isione Oliveira Castro, Eclair Venturini Filho, Renata Diniz, Marianna Vieira Sobral, Willian Ricardo Rocha and Eder do Couto Tavares

11225



Complementary effect of co-doping Mn and B in Fe-N-C single-atom catalysts on enhancing the oxygen reduction reaction performance

Jiansheng Liu, Lili Cao, Haoran Ma, Qiyue Jia, Jianing Ma and Zhanli Chai*

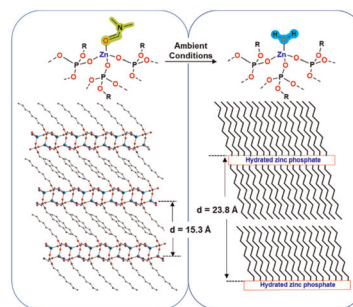


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1D polymeric and 2D layered zinc monoalkyl phosphates bearing long alkyl chains: synthesis, structural transformations and thermal behaviour

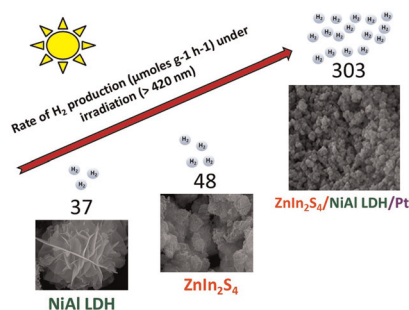
Harsha Arya and Ramaswamy Murugavel*



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ZnIn₂S₄ combined with a flower-like NiAl-layered double hydroxide with enhanced photocatalytic H₂ production activity

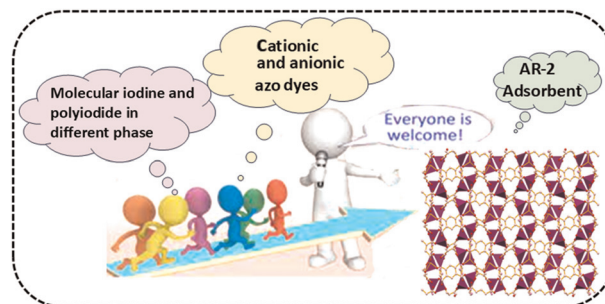
Anna P. Souri, Onur Cavdar, Maria Zografaki, Leila Zouridi, Vassilios Binas, Tomasz Klimczuk, Kostiantyn Nikiforow and Anna Malankowska*



11262

Engineering an amine-functionalized Zn(II) interpenetrated metal–organic framework for comprehensive iodine uptake across diverse phases and selective azo dye adsorption

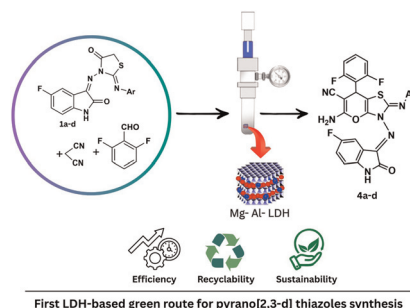
Shaikh Arfa Akmal, Mohd Khalid,* M. Shahid and Musheer Ahmad



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Harnessing Q-tube pressure reactor for the synthesis of novel pyrano[2,3-d]thiazole derivatives utilizing Mg–Al-layered double hydroxide catalyst: catalysis meets sustainability

Salma Akram Shaikh, Nesreen Said I. Ahmed, Wafa Bawazir, Tamer S. Saleh* and Mohamed Mokhtar M. Mostafa*

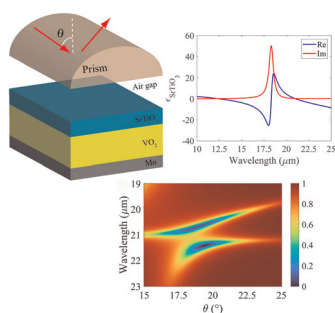


First LDH-based green route for pyrano[2,3-d]thiazoles synthesis



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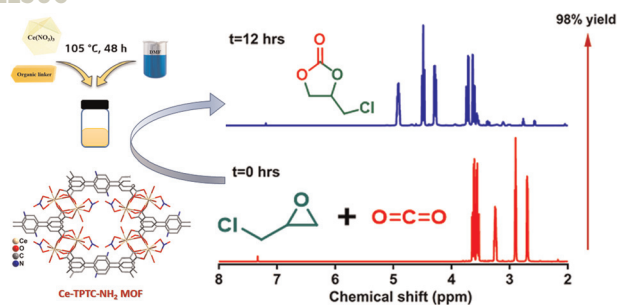
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Dynamically tunable strong coupling via insulator–metal phase transition in VO_2 coupled to mid-infrared SrTiO_3 phonons

Yuliang Zhi, Xin Cui, Qi Fang and Gaige Zheng*

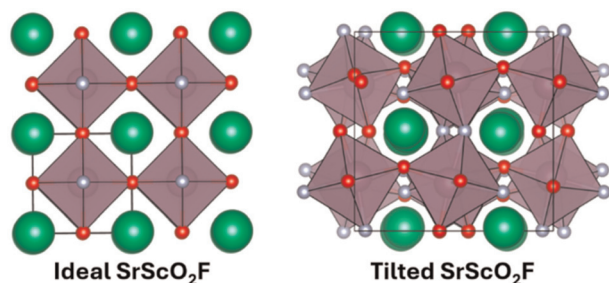
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Amino-functionalized cerium based MOF for sustainable CO_2 fixation into cyclic carbonates

Yogesh Kumar, Rishukumar Panday and Shaibal Banerjee*

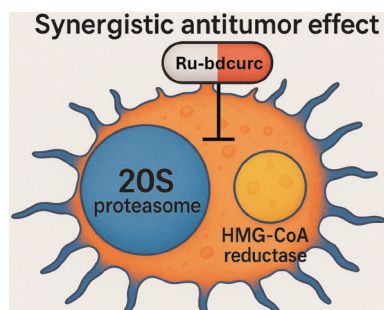
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Structure prediction of mixed-anion perovskites: systematic approach integrating octahedral tilting and anion ordering

Sanni Määttänen and Antti J. Karttunen*

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Ruthenium(II)-bisdemethoxycurcumin conjugate complexes as potent antitumour agents through simultaneous inhibition of 20S proteasome and HMG-CoA reductase

Sara Pagliaricci, Noemi Pagliaricci, Alessia Tombesi, Claudio Pettinari, Massimiliano Cuccioloni, Helena Juricic, Agustín Galindo, Farzaneh Fadaei-Tirani, Riccardo Pettinari* and Fabio Marchetti*

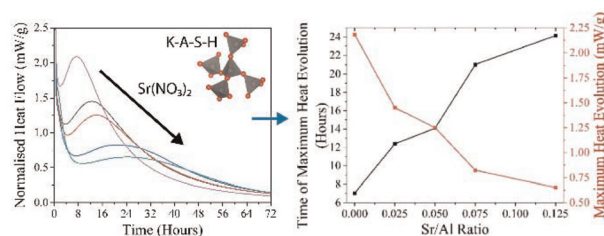


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Reaction mechanisms and kinetics in geopolymers incorporating strontium salts

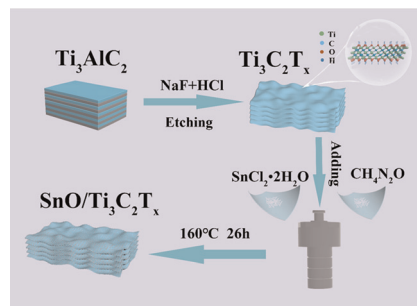
Kyle T. O'Donoghue, Daniel A. Geddes, Martin Hayes and Brant Walkley*



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Tin oxide/MXene nanocomposite for energy storage devices

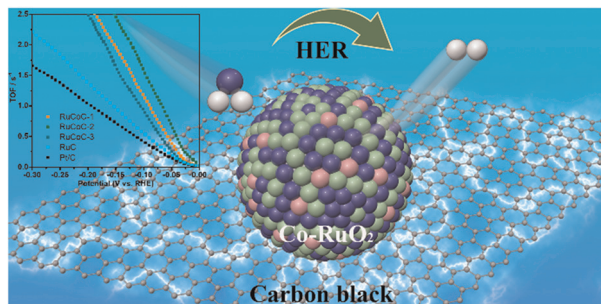
Jie Liu, Jianjian Fu, Qixun Xia,* Min Xia, Mengen Ji, Chuansong Yang and Nanasahab M. Shinde*



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High-performance Co-doped RuO₂ nanoparticles for alkaline hydrogen evolution reaction

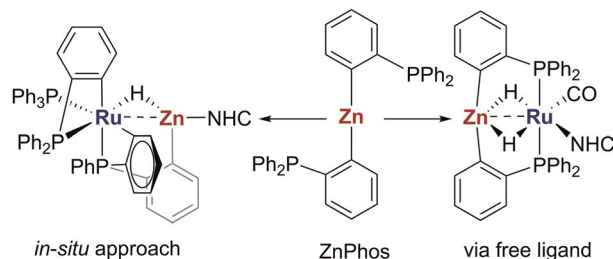
Zhe Liu, Tao Zhou, Jeonghoon Kim and Taekyung Yu*



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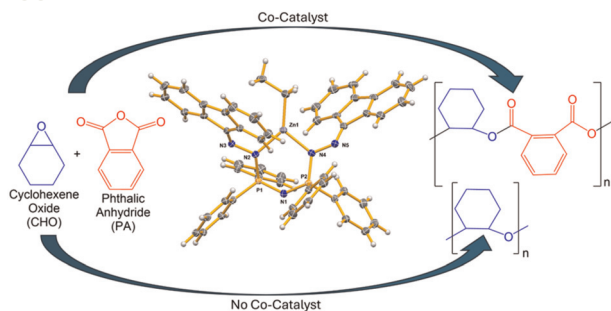
Attempted syntheses of ZnPhos-ruthenium complexes (ZnPhos = bis(2-diphenylphosphino phenyl)zinc)

Amber M. Walsh, Ludovic J. Lewis, John P. Lowe, Mary F. Mahon and Michael K. Whittlesey*



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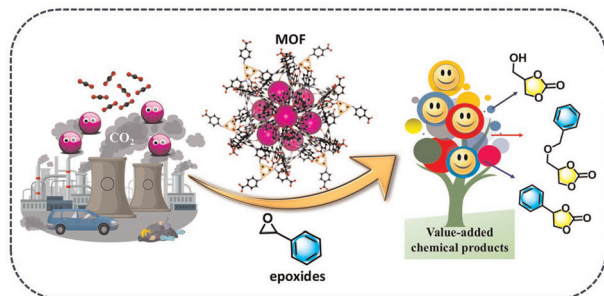
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A new class of ligand derived from the reactions of bis(dialkylphosphino)amines and 9-diazafluorene: preparation, structure and reactivity

Matthew J. J. Laprade, Katherine N. Robertson, Jason A. C. Clyburne* and Christopher M. Kozak*

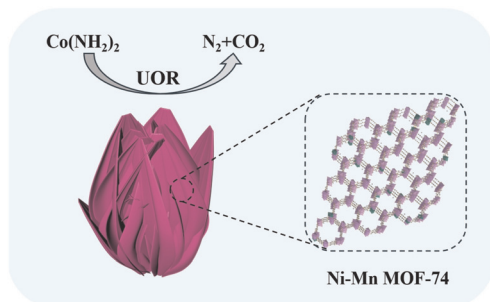
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Engineering cost-effective N-rich metal–organic frameworks (MOFs) for highly efficient CO₂ capture and its catalytic conversion to cyclic carbonates: a step towards sustainable carbon utilization

Mohd Zeeshan, Mohammad Yasir Khan, M. Shahid,* Saiqa Ikram* and Musheer Ahmad

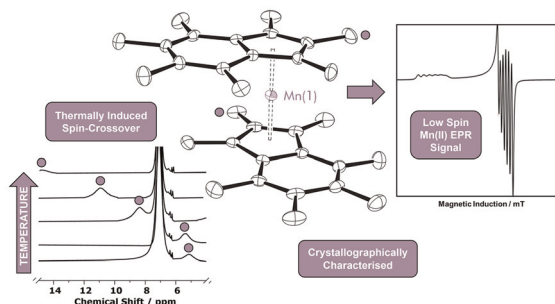
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A doping effect in Mn MOF-74 induced enhanced urea oxidation-assisted hydrogen production

Kang Wang, Chao Fan, Ruihang Hu, Chen Sun and Yan-Qin Wang*

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Synthesis, characterisation, and magnetic properties of a permethylindenyl manganocene

Alexander Evans, Thomas A. Q. Arnold, Paul Ransom, Samantha C. Binding, William K. Myers, Agamemnon E. Crumpton, Zoë R. Turner, Jean-Charles Buffet and Dermot O'Hare*

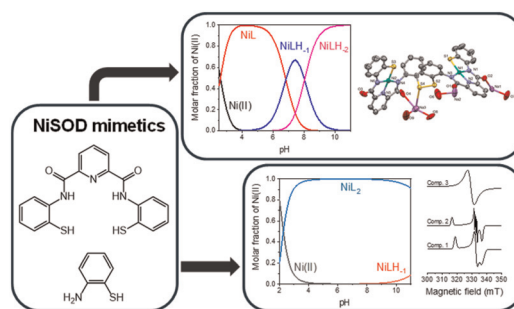


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Are thiophenol based small molecular weight nickel complexes sufficient mimics of the NiSOD enzyme?

Róbert Diószegi, Nóra V. May, István Fábián and Norbert Lihi*



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Composition-dependent thermoelectric properties of hybrid tin perovskites $(\text{CH}_3\text{NH}_3)_x\text{Cs}_{1-x}\text{SnI}_3$: insights into electrical and thermal transport performance

Alexandra Ivanova,* Olga Kutsemako, Aleksandra Khanina, Pavel Gorbachev, Margarita Golikova, Irina Shamova, Olga Volkova, Lev Luchnikov, Pavel Gostishchev, Danila Saranin and Vladimir Khovaylo

