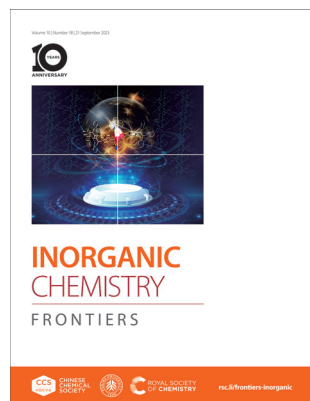


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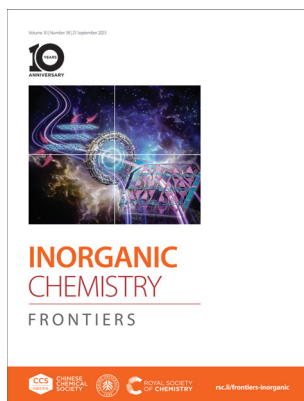
ISSN 2052-1553 CODEN ICFNAW 10(18) 5201-5498 (2023)



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See Lin Du, Qi-Hua Zhao et al., pp. 5258–5269.

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Inside cover

See Chao Wu, Chi Zhang et al., pp. 5270–5277.

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REVIEWS

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Single-ion magnetism behaviors in lanthanide(III) based coordination frameworks

Qingyun Wan,* Masanori Wakizaka and Masahiro Yamashita*

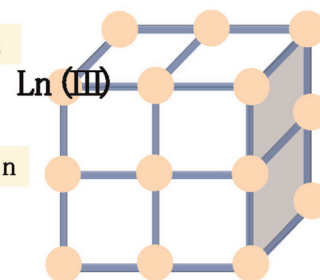
Single-ion magnetism

Proton conduction

Host-guest interaction

Porosity

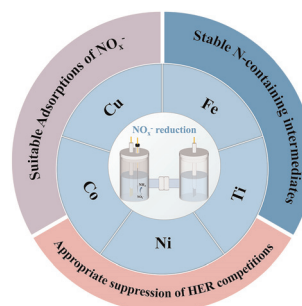
⋮



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Recent developments and prospects for engineering first-row transition metal-based catalysts for electrocatalytic NO_x[−] reduction to ammonia

Yi Feng, Lei Chen and Zhong-Yong Yuan*



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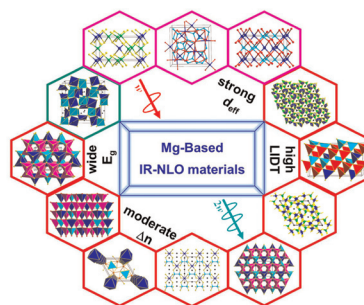


REVIEWS

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An overview of Mg-based IR nonlinear optical materials

Jia-Xiang Zhang, Mao-Yin Ran, Xin-Tao Wu, Hua Lin* and Qi-Long Zhu*

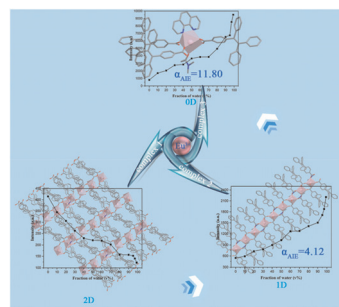


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Dimensional regulation of the aggregation-induced emission properties for a complex

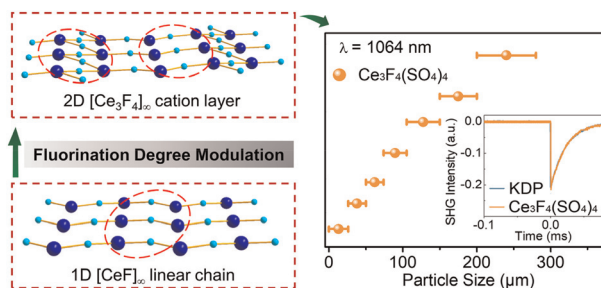
Shuyu Wang, Lei Wang, Fang Fang, Xun Ma, Yuanyuan Guo, Ruidong Wang, Suoshu Zhang, Zhen Zhang, Lin Du* and Qi-Hua Zhao*



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 $\text{Ce}_3\text{F}_4(\text{SO}_4)_4$: cationic framework assembly for designing polar nonlinear optical material through fluorination degree modulation

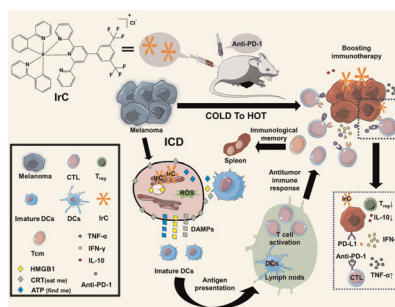
Tianhui Wu, Xingxing Jiang, Chao Wu,* Zheshuai Lin, Zhipeng Huang, Mark G. Humphrey and Chi Zhang*



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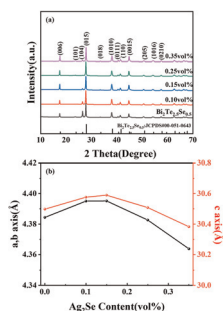
An endoplasmic reticulum-targeting iridium(III) complex induces immunogenic cell death in melanoma cells and enhances anti-PD-1 immunotherapy by remodeling tumor microenvironment

Yi Rong, Zhongxian Fan, Zhijie Yu, Li Wei, Han Shen, Huaiyi Huang, Xiaojuan Hao, Zizhuo Zhao and Jinquan Wang*



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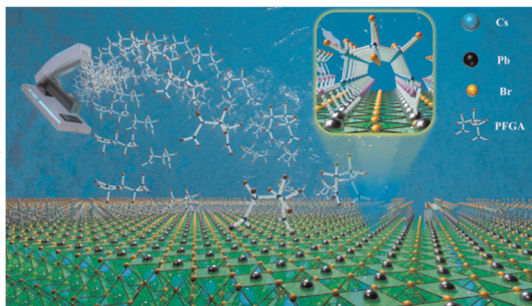
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Enhanced near-room temperature thermoelectric performance and mechanical strength of n-type BiTeSe materials incorporated with Ag₂Se inclusions

K. Chen, T. Chen, L. Ai, H. W. Ming, S. J. Li, J. Zhang,*
X. Y. Qin, H. X. Xin, C. J. Song and D. Li*

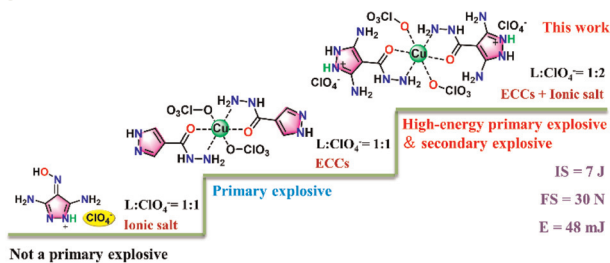
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Stapled ligand for synthesis of highly emissive and stable CsPbBr₃ perovskite nanocrystals in polar organic solvent

Tianju Chen, Qi Yang, Peng Zhang, Ruihao Chen,*
Yuke Lin, Weifang Zhou, Laizhi Sui,* Xuan Zheng,*
Guoliang Chen and Feiming Li*

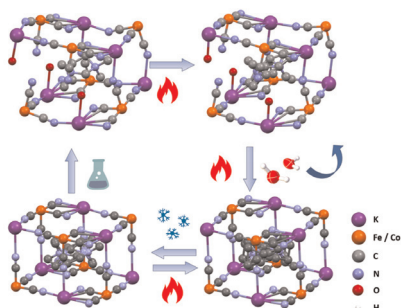
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The combined effect of pyrazole and amino groups: preparation of novel energetic coordination compounds with high ClO₄⁻ content

Tingwei Wang, Chao Zhang, Meiqi Xu, Baolong Kuang,
Zhiming Xie, Zujia Lu, Zhenxin Yi, Yan Li and
Jianguo Zhang*

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Structural phase transition and dielectric responses in two novel cyano-bridged coordination polymers synthesized by sealing the incomplete cyano-bridged cage

Zhuoer Cai, Xiu-Ni Hua,* Yinan Zhang, Jian Chen,
Kai Sun, Zining Wang, Xianmin Liu, Xinyi Zhang,
Shiyue Xiao and Baiwang Sun

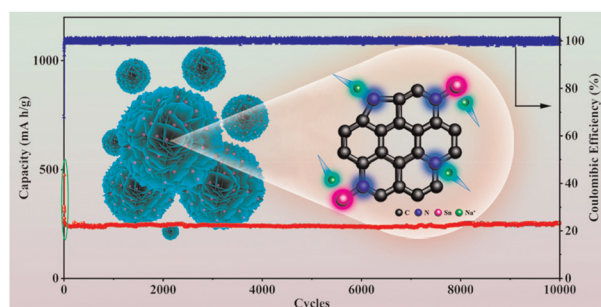


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Metallic tin nanodots inducing an interfacial adsorption–insertion mechanism for carbon nano-honeycombs with enhanced sodium storage

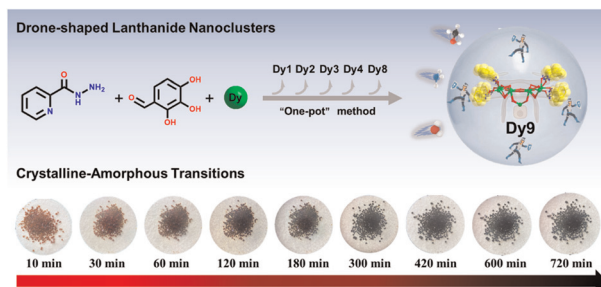
Xuepeng Ni, Kunming Li, Xin Wang, Xian Zhao, Dong Li, Huifang Chen, Qilin Wu,* Anqi Ju* and Meifang Zhu



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Highly stable drone-shaped lanthanide clusters: structure, assembly mechanism, and crystalline–amorphous transitions

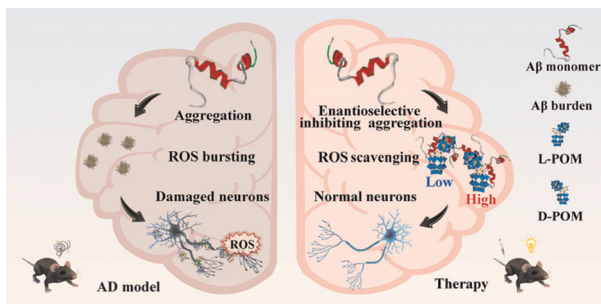
Yun-Lan Li, Wen-Wen Qin, Hai-Ling Wang, Zhong-Hong Zhu,* Fu-Pei Liang and Hua-Hong Zou*



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Enantioselective modulation of amyloid burden and memory deficits by chiral polyoxometalates for Alzheimer's disease treatment

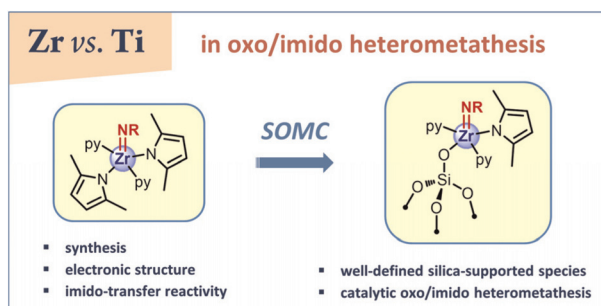
Shuyang Hu, Xinlu Ning, Jie Lv, Yuxin Wei, Huiran Zhang* and Meng Li*



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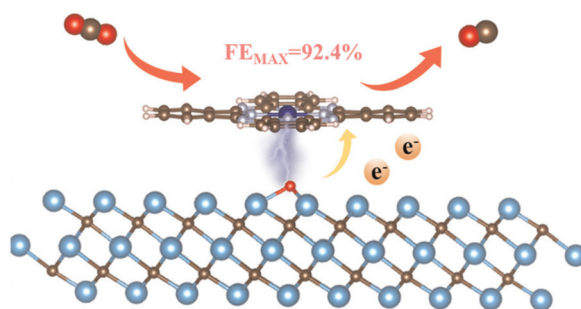
Zr vs. Ti molecular and silica-supported imido complexes in stoichiometric and catalytic oxo/imido heterometathesis

Andrey V. Pichugov, Andrey V. Rumyantsev, Nikolai S. Bushkov, Anton A. Zhizhin, Dmitry Yu. Aleshin, Valeria N. Talanova, Rina U. Takazova, David Trummer, Deni Mance, Pavel A. Zhizhko* and Dmitry N. Zarubin*



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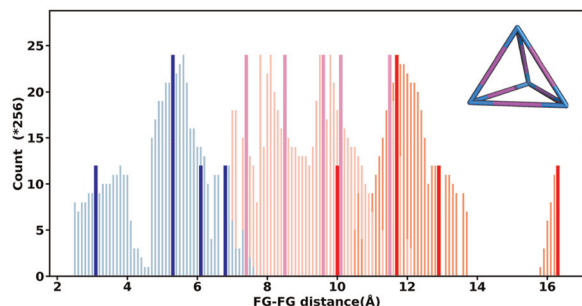
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Tunable functional groups on MXene regulating the catalytic property of anchored cobalt phthalocyanine for electrochemical CO₂ reduction

Zhixiang Zhou, Fengshou Yu, Yang You, Jiayu Zhan and Lu-Hua Zhang*

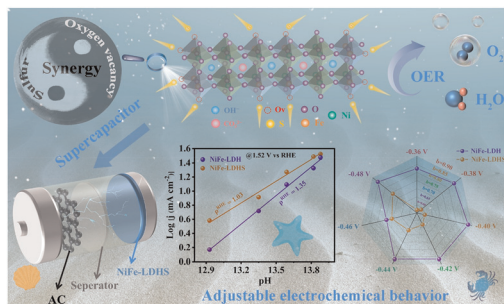
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Machine learning of isomerization in porous molecular frameworks: exploring functional group pair distance distributions

Maryam Nurhuda, Yusuf Hafidh, Cansu Dogan, Daniel Packwood, Carole C. Perry and Matthew A. Addicoat*

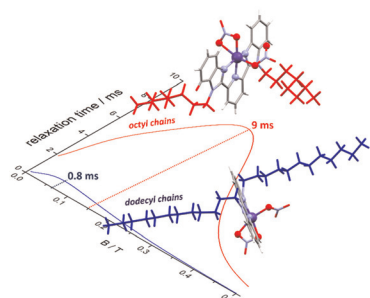
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Oxygen vacancies meet partial S substitution: an effective strategy to achieve obvious synergistic effects and adjustable electrochemical behavior in NiFe-LDH for enhanced OER and capacitive performance

Dong Shi, Yajun Ji,* Faxue Lu, Junnan Yao, Shixiong Zhang and Pengcheng Zhang

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Neutral cobalt(II)-bis(benzimidazole)pyridine field-induced single-ion magnets for surface deposition

Jana Juráková, Ondřej F. Fellner, Sören Schlittenhardt, Šárka Vavrečková, Ivan Nemec, Radovan Herchel, Erik Čížmár, Vinicius Tadeu Santana, Milan Orlita, Denis Gentili, Giampiero Ruani, Massimiliano Cavallini, Petr Neugebauer, Mario Ruben and Ivan Šalitroš*

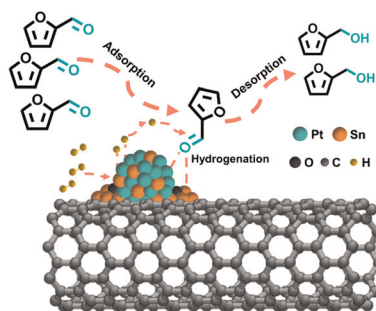


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Synthesis of a Pt_3Sn catalyst using a solvothermal method assisted by deep eutectic solvents for selective hydrogenation of furfural to furfuryl alcohol

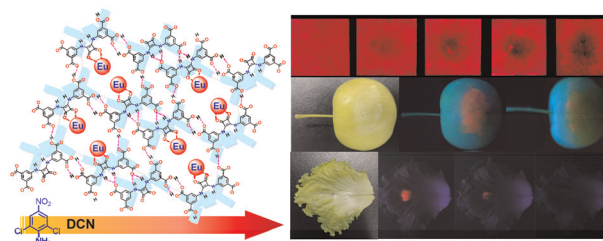
Ruonan Wang, Xuran Ma, Dairui Ding, Bowen Huang,* Zhiguo Zhu, Ting Su, Weiping Liao, Hongying Lü* and Kaixuan Yang*



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A squaramide-based anionic hydrogen-bonded organic framework: enhancing sensing performance for pesticides by post-metallization with *in situ* imaging

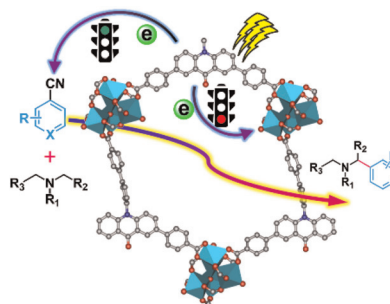
Weiwei Jiang, Hao Zheng, Yuxuan Wu, Pengyan Wu,* Liyuan Jing, Xingcheng Yuan,* Xichen Wang and Jian Wang*



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Ligand-regulated photoinduced electron transfer within metal–organic frameworks for efficient photocatalysis

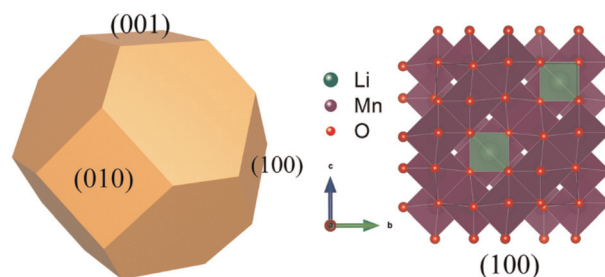
Yang Tang, Guanfeng Ji, Hanning Li, Hui Gao, Cheng He, Liang Zhao* and Chunying Duan



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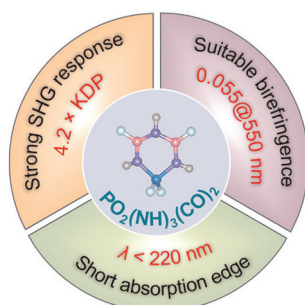
Understanding the key role of {100} exposed crystal facets on the electrochemistry of the spinel LiMn_2O_4 cathode

Peiyu Hou, Yuhang Tian, Zezhou Lin, Mohan Dong and Feng Li*



RESEARCH ARTICLES

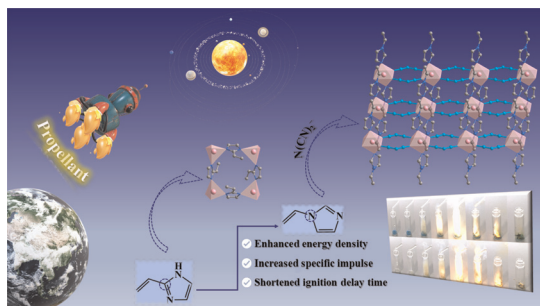
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A UV solar-blind nonlinear optical crystal with confined π -conjugated groups

Xianyu Song, Zhipeng Du, Belal Ahmed, Yanqiang Li, Yang Zhou, Yipeng Song, Weiqi Huang, Jieyu Zheng, Junhua Luo and Sangen Zhao*

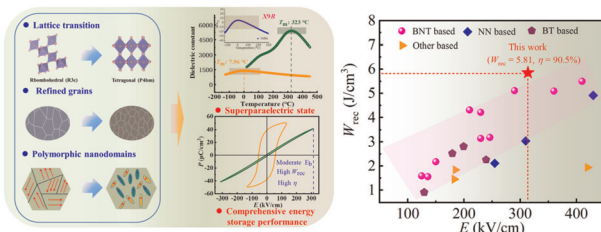
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Energetic isostructural metal imidazolate frameworks with a bridging dicyanamide linker towards high-performance hypergolic fuels

Hong-Yi Bian, Yun-Fan Yan, Meng Cui, Tian-Tian Song, Xiao-Di Guo, Jian-Gang Xu,* Fa-Kun Zheng* and Guo-Cong Guo

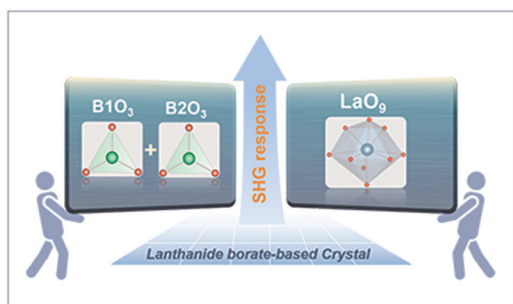
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Ultrahigh energy storage performance of a $0.75\text{Bi}_{0.47}\text{Na}_{0.47}\text{Ba}_{0.06}\text{TiO}_3\text{-}0.25\text{CaTi}_{0.8}\text{Sn}_{0.2}\text{O}_3$ ceramic under moderate electric fields

Jiangtao Fan, Jiaxin Wang, Gang He,* Zhen Long and Zhanggui Hu*

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$\text{KNa}_2\text{La}_2(\text{BO}_3)_3$: a shortite-type lanthanide borate exhibiting strong nonlinear optical activity induced by isolated $[\text{BO}_3]$ triangles and distorted $[\text{LaO}_9]$ polyhedra

Jie Song, Conggang Li,* Jinmiao Jiao, Yuheng She, Wenli Zhao, Fei Liang,* Ning Ye, Zhanggui Hu* and Yicheng Wu



CORRECTION

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Correction: The Mössbauer effect using ^{57}Fe -ferrabisdicarbollide ($[\text{o-}^{57}\text{FESAN}]^-$): a glance into the potential of a low-dose approach for glioblastoma radiotherapy

Ana B. Buades, Laura C. J. Pereira, Bruno J. C. Vieira, Ana C. Cerdeira, João C. Waerenborgh, Teresa Pinheiro, António P. A. Matos, Catarina G. Pinto, Joana F. Guerreiro, Filipa Mendes, Francesc Teixidor, Clara Viñas* and Fernanda Marques*

