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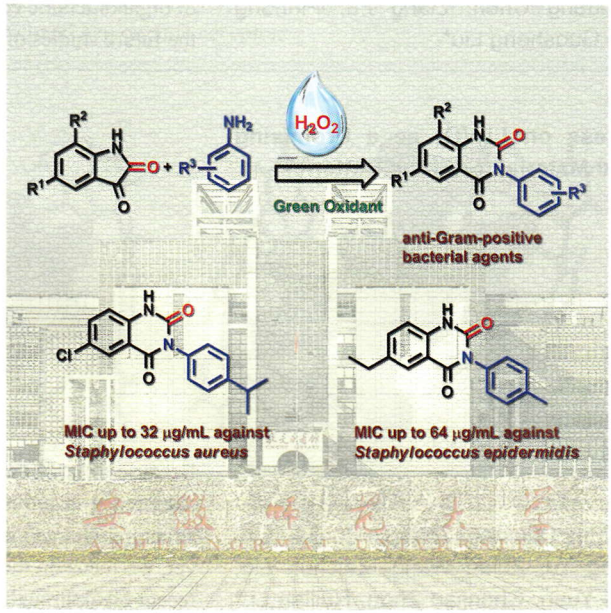
COVER PICTURES

The cover picture shows a green and highly efficient synthetic method for the synthesis of quinazoline-2,4-diones from readily available isatins and arylamines. This method is interesting in keeping with the notion of green chemistry because of the use of hydrogen peroxide as the terminal oxidant. The rearrangement oxidation exhibited good functional group tolerability, metal-free catalysts, obviating the need for oxidants and only environmentally benign H_2O was released. Moreover, an antibacterial activity study was performed to evaluate the antimicrobial activities. The results showed that some of the testing compounds inhibited the growth of the *Staphylococcus aureus* (32 μg/mL) and *Staphylococcus epidermidis* (64 μg/mL), which could potentially solve the problem of multidrug resistance. More details are discussed in the article by Shang *et al.* on page 1835—1843.



The back cover picture shows X-ray near edge absorption spectroscopy has been applied to cathode materials for lithium-ion batteries to explore its structure-activity relationship. The result shows that in the Li-rich cathode $Li_{1.15}Ni_{0.47}Sb_{0.38}O_2$, as a model system, Ti ions replaced the Li ions and then made an antistructure defect. It would change our understanding to the doped method for the cathode layer materials and benefit for designing other more powerful cathodes. In the picture, the road has been represented by the curve shape of the XANES of the as-studied sample. The atomic arrangement around the Ti ion of the sample has been put into the tank position of the car. NSRL, National Synchrotron Radiation Laboratory, is the name of our laboratory. More details are discussed in the article by Chu *et al.* on page 1853—1860.

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REVIEWS

FULL PAPERS

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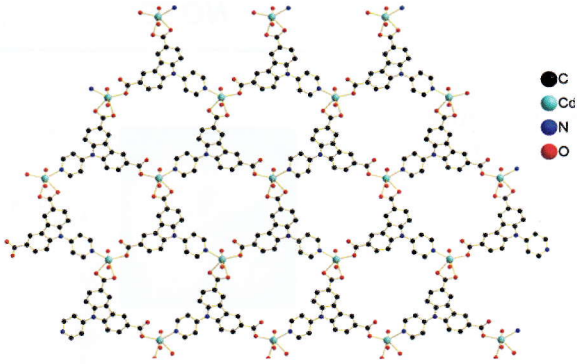
1869

A 2D Metal-Organic Framework Based on 9-(Pyridin-4-yl)-9*H*-carbazole-3,6-dicarboxylic Acid: Synthesis, Structure and Properties

Xinhui Zhou,* Yali Zhu, Liang Li, Wei Huang

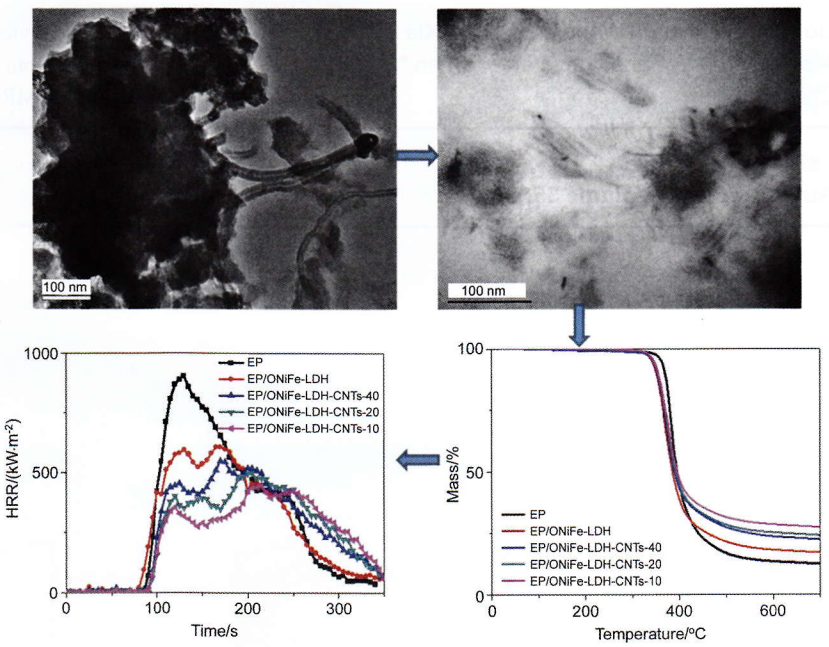


A metal-organic framework based on 9-(pyridin-4-yl)-9*H*-carbazole-3,6-dicarboxylic acid (H_2L) has been synthesized. It features the 2D framework and exhibits a narrow emission band with the peak at 414 nm.

1875

Improving Thermal and Flame Retardant Properties of Epoxy Resin with Organic NiFe-Layered Double Hydroxide-Carbon Nanotubes Hybrids

Qinghong Kong, Ting Wu, Yingqi Tang, Lemin Xiong, Hong Liu, Junhao Zhang, Ruihua Guo,* Feng Zhang*

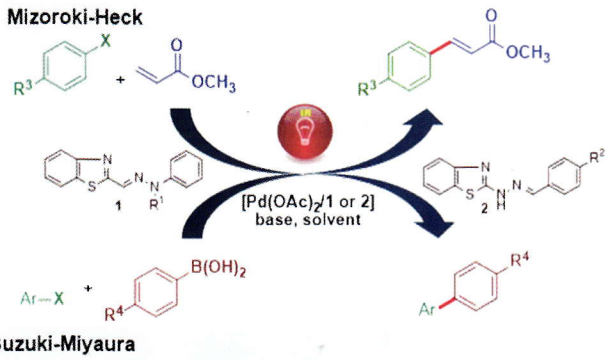


Organic nickel-iron layered double hydroxides (ONiFe-LDH) were assembled on carboxylated carbon nanotubes (CNTs) through co-precipitation method and characterized. EP/ONiFe-LDH-CNTs nanocomposites containing 4 wt% of ONiFe-LDH-CNTs with different ratios of ONiFe-LDH and CNTS were prepared by ultrasonic dispersion and program temperature curing method. Strong combination of the above nanofillers with the EP matrix provided an efficient thermal and flame retardant improvement for the resulting nanocomposites. It is showed that EP containing 4 wt% ONiFe-LDH-CNTs hybrid exhibited superior flame retardant and thermal properties compared with pure EP.

1881

Arylhydrazones Derivatives Containing a Benzothiazole Moiety, Efficient Ligands in the Palladium-Catalyzed Mizoroki–Heck and Suzuki–Miyaura Cross-coupling Reactions under IR Irradiation

Fernando Ortega-Jiménez,* José Guillermo Penieres-Carrillo, José Guadalupe López-Cortés, M. Carmen Ortega-Alfaro, Selene Lagunas-Rivera



Simple arylhydrazones **1** and **2** containing a benzothiazole moiety are used as efficient ligands in the palladium-catalyzed Mizoroki–Heck and Suzuki–Miyaura cross-coupling reactions under infrared irradiation as an alternative source of energy.

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NOTE

