Journal of Materials Chemistry

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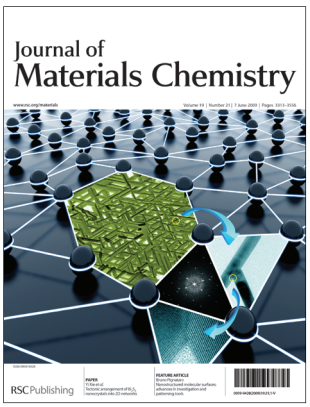
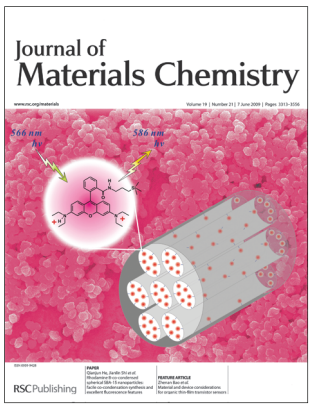
ISSN 0959-9428 CODEN JMACEP 19(21) 3313–3556 (2009)

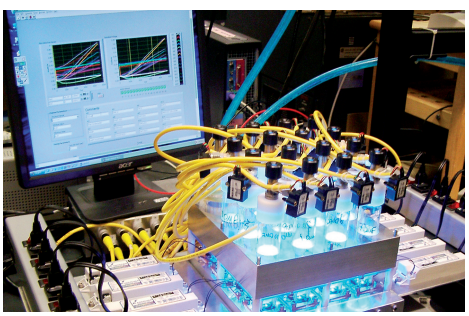


Cover
See Y. Xie *et al.*, pp. 3378–3383. Tectonic arrangement of Bi_2S_3 nanocrystals into 2D networks. Image reproduced by permission of Yi Xie from *J. Mater. Chem.*, 2009, **19**, 3378.

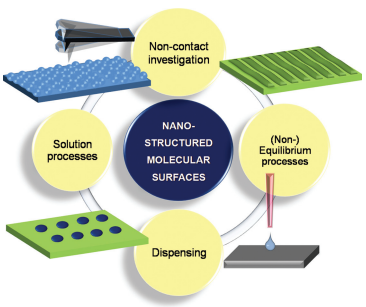


Inside cover
See Jianlin Shi *et al.*, pp. 3395–3403. Rhodamine B-co-condensed spherical SBA-15 fluorescence nanoparticles, with large doping amounts of covalently bonded and highly monodispersed RhB within mesoporous channels exhibit high fluorescence quantum yields and fluorescence detectivity and excellent photostability.
Image reproduced by permission of Jianlin Shi from *J. Mater. Chem.*, 2009, **19**, 3395.

HIGHLIGHT



FEATURE ARTICLES



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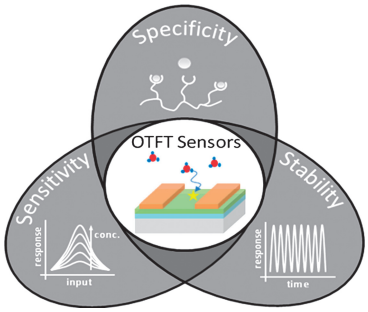

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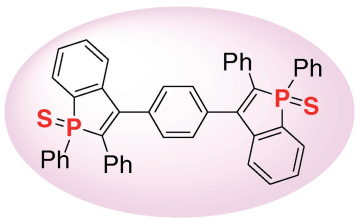

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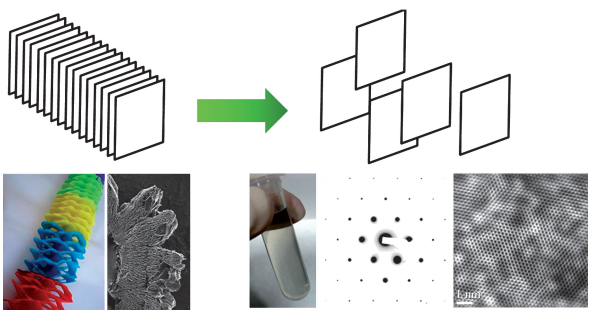

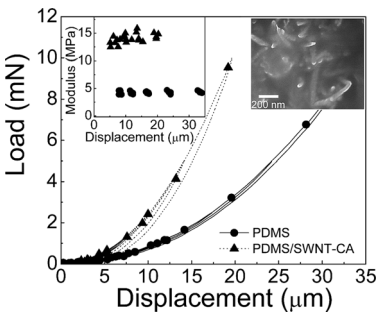

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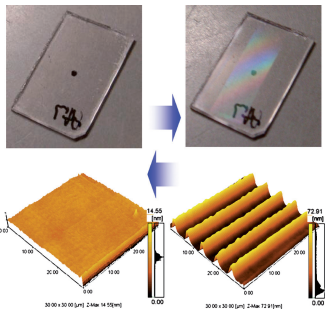
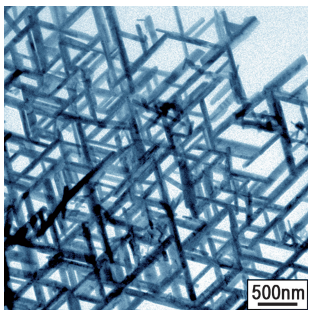


Reversible phototriggered micromanufacturing using amorphous photoresponsive spirooxazine film

Takashi Ubukata,* Shohei Fujii and Yasushi Yokoyama

Surface relief gratings (SRGs) were formed on amorphous films of highly durable spirooxazine molecules by spatially patterned UV light exposure of the films due to mass transfer. SRGs were erased by heating and reformed by illumination with spatially patterned light again. This is the first reversible SRG formation using a photochromic compound other than azobenzene-related compounds.

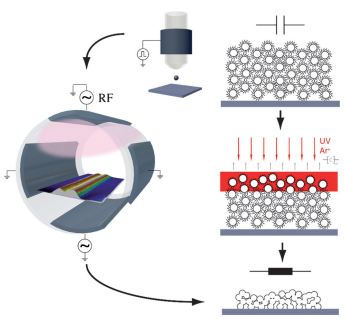
PAPERS



Tectonic arrangement of Bi_2S_3 nanocrystals into 2D networks

Yu Zhao, Yi Xie,* Jian-Sheng Jie, Chun-Yan Wu and Si Yan

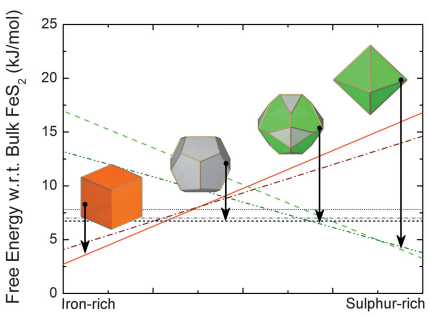
Two-dimensional bismuth sulfide networks with controlled aspect ratio of building blocks have been fabricated *via* a template/catalyst-free solution route by oriented attachment and natural growth.



Argon plasma sintering of inkjet printed silver tracks on polymer substrates

Ingo Reinhold, Chris E. Hendriks, Rebecca Eckardt, Johannes M. Kranenburg, Jolke Perelaer, Reinhard R. Baumann and Ulrich S. Schubert*

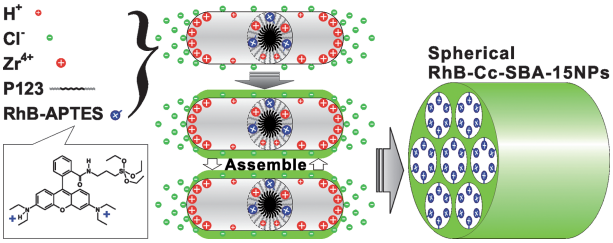
Argon plasma was used as an alternative and selective sintering technique for inkjet printed silver tracks on common polymer substrates. This resulted in features with a resistivity less than one order of magnitude higher then the bulk silver value in less than 60 minutes without affecting the substrate.

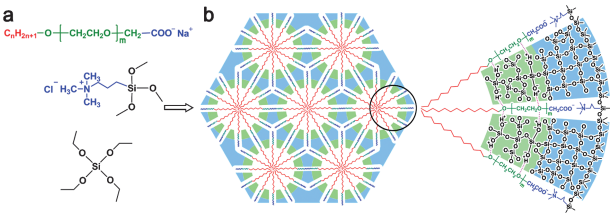


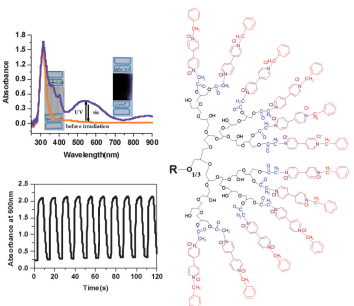
Modelling nanoscale FeS_2 formation in sulfur rich conditions

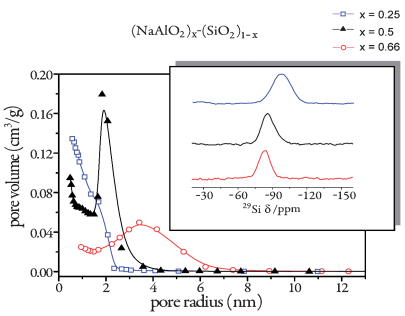
A. S. Barnard* and S. P. Russo

The formation of single monodispersed nanocrystals of pyrite is usually associated with sulfide-rich conditions. We study the roles of sulfur concentration and temperature in moderating particle morphology. Shape may be indicative of the S concentration present during formation, and offer a viable route for tailoring the nanomorphology during synthesis.









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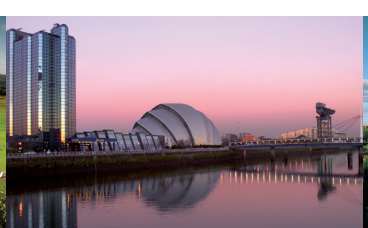


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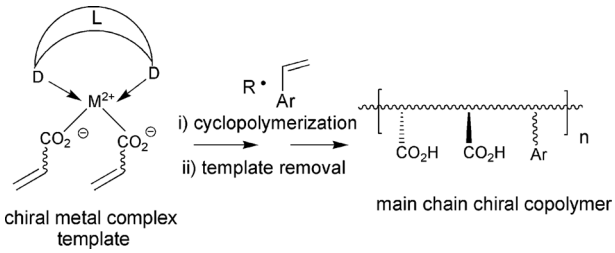

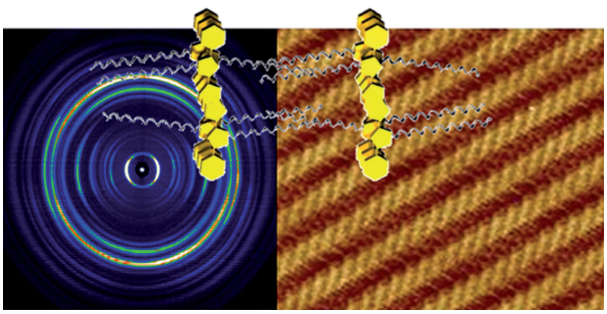

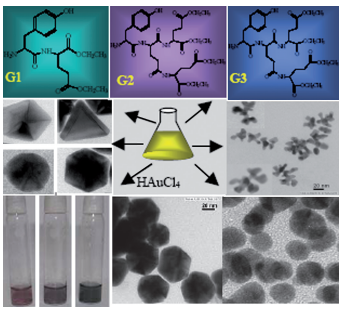

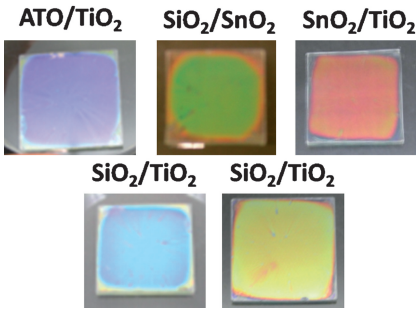

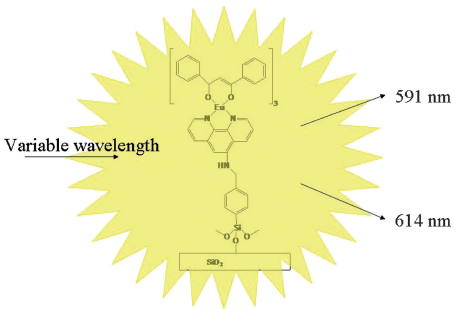

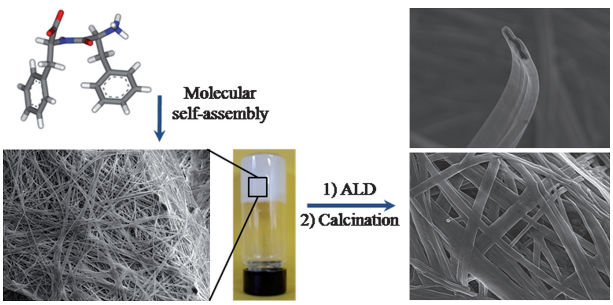

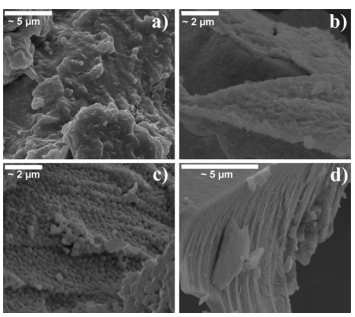

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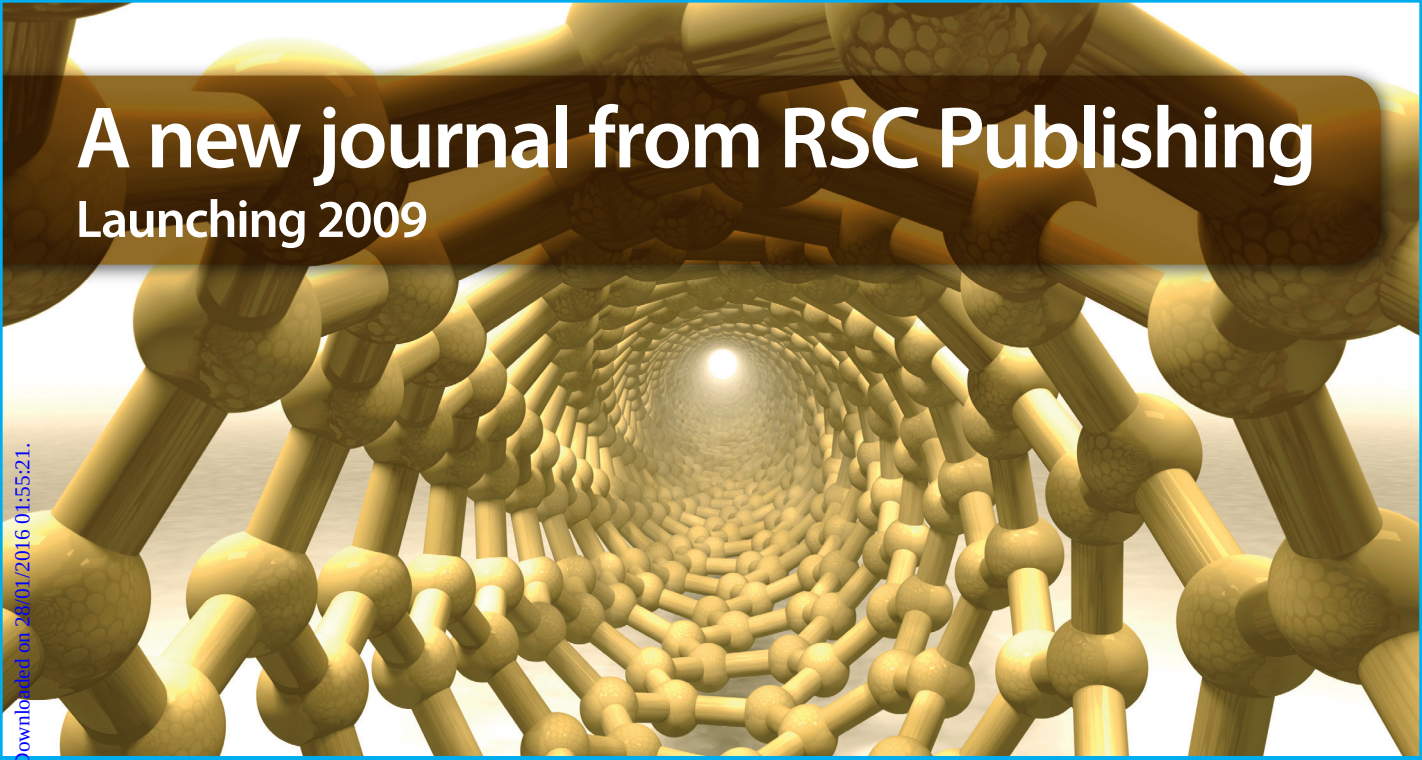

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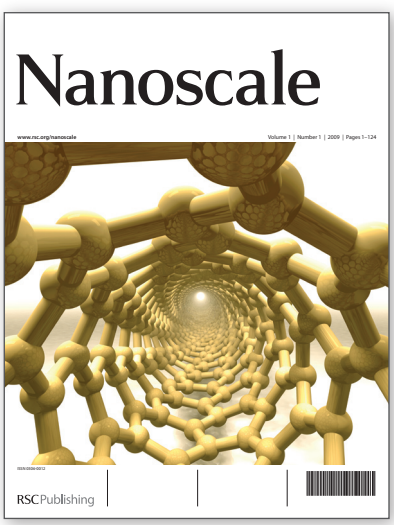

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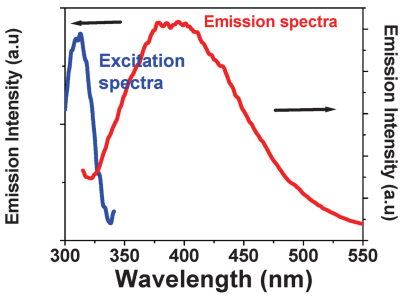

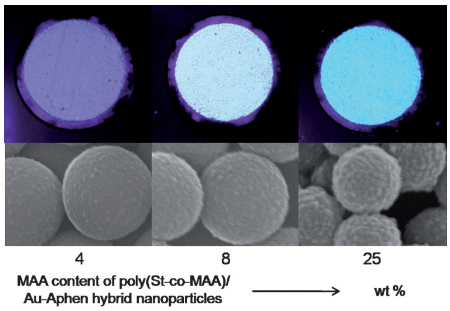

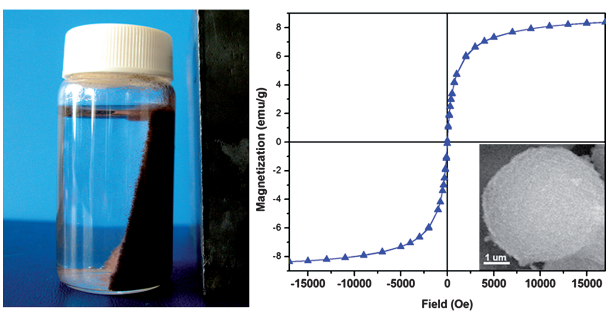

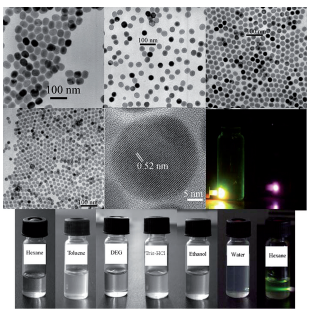

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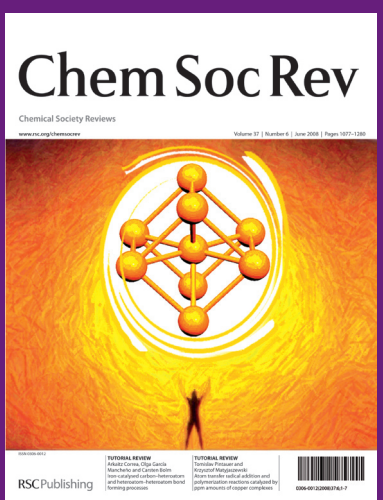

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