

POSS-Based Luminescent Porous Polymers for Carbon Dioxide Sorption and Nitroaromatic Explosives Detection

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Table S1 HOMO and LUMO energies of LHPP-3, NT, DNT and TNT

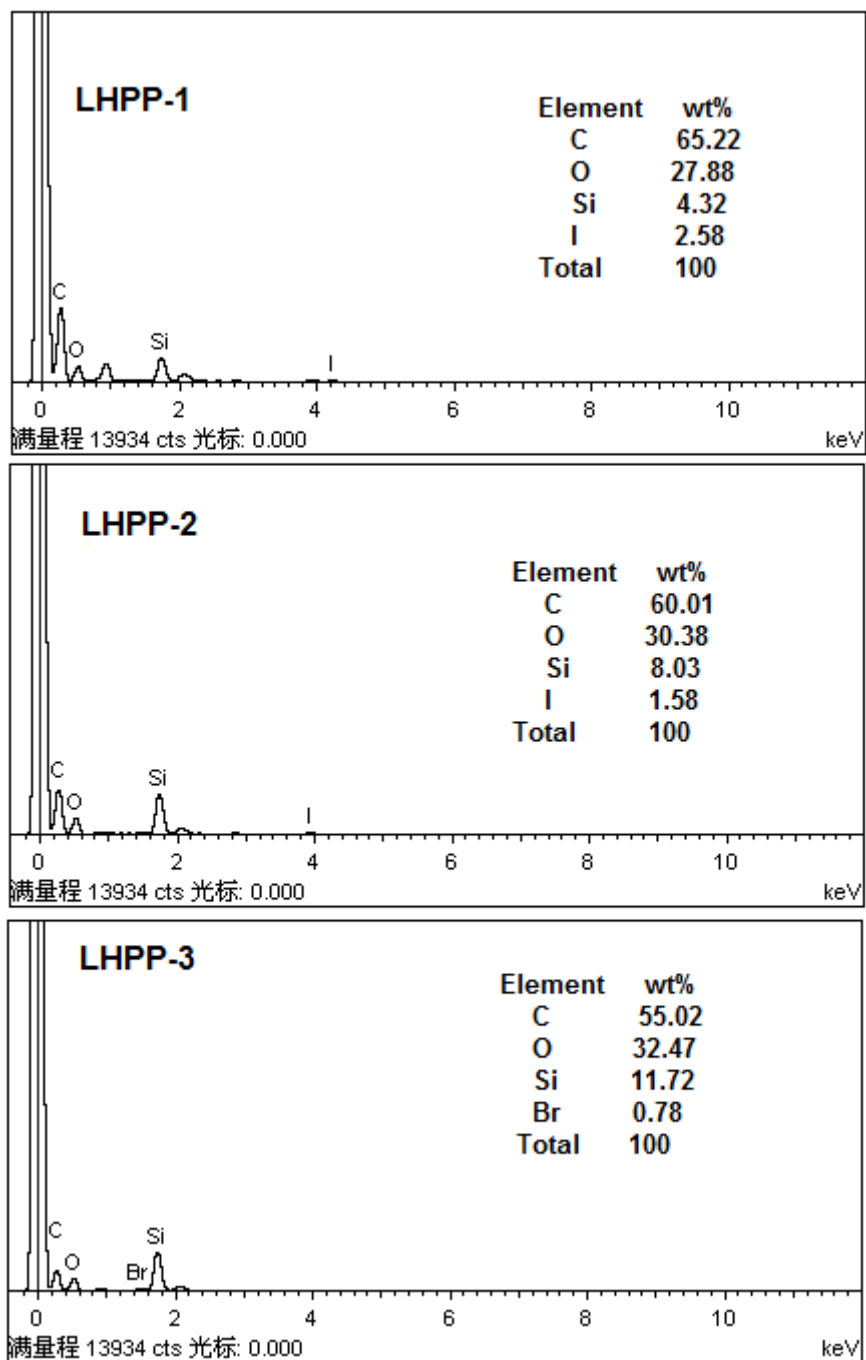


Fig. S1 Energy dispersive spectroscopy of LHPP-1~LHPP-3

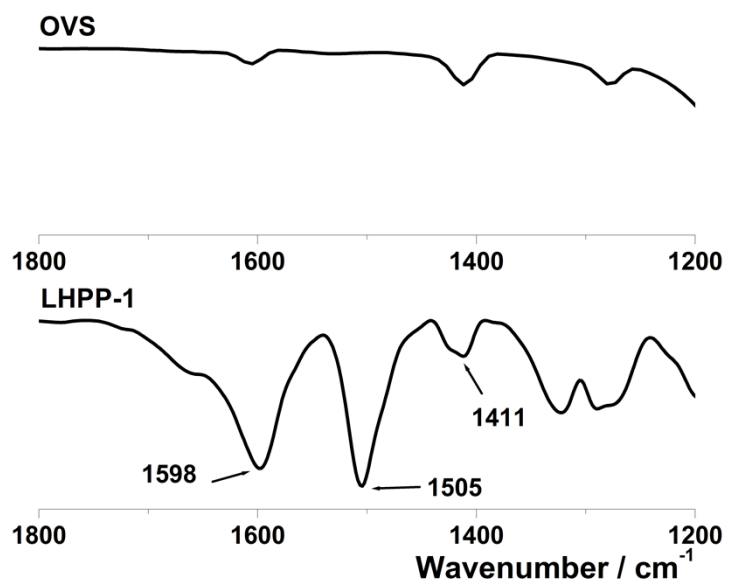


Fig. S2 FTIR spectra enlarged from 1800 cm⁻¹ to 1200 cm⁻¹ of OVS and LHPP-1

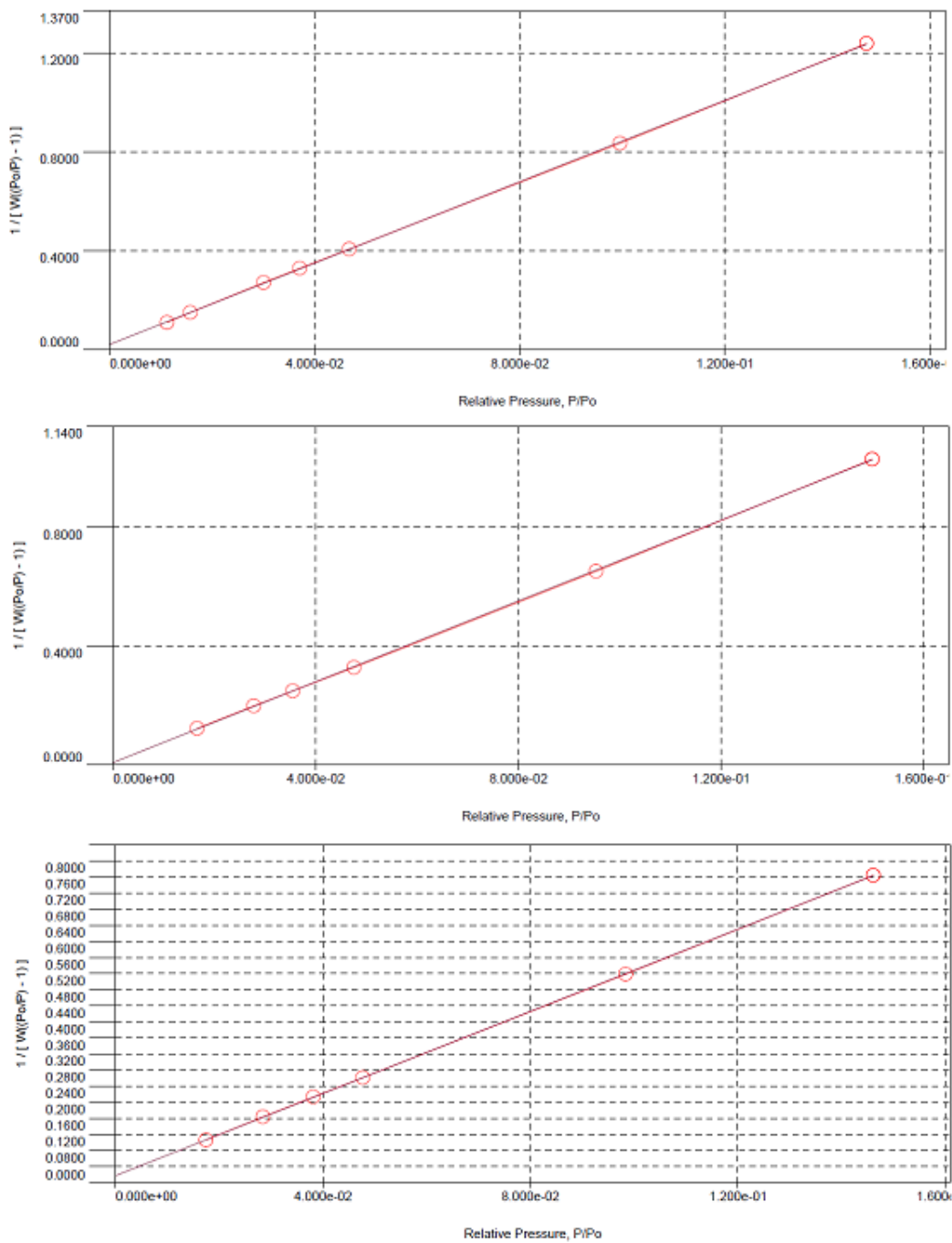


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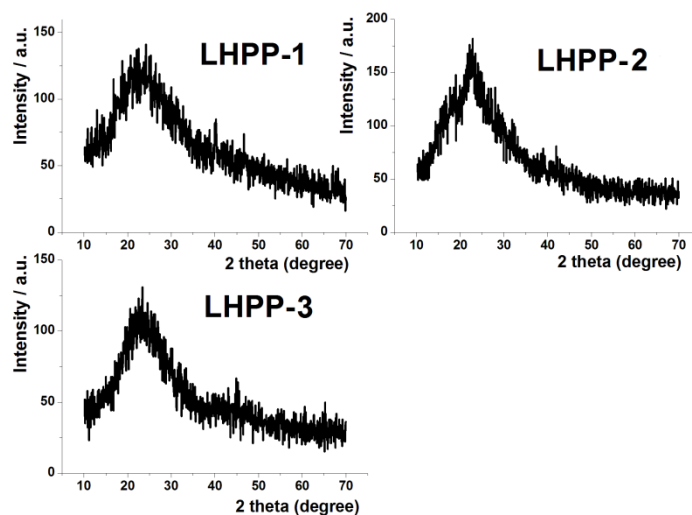


Fig. S4 XRD patterns of LHP-1 to LHP-3

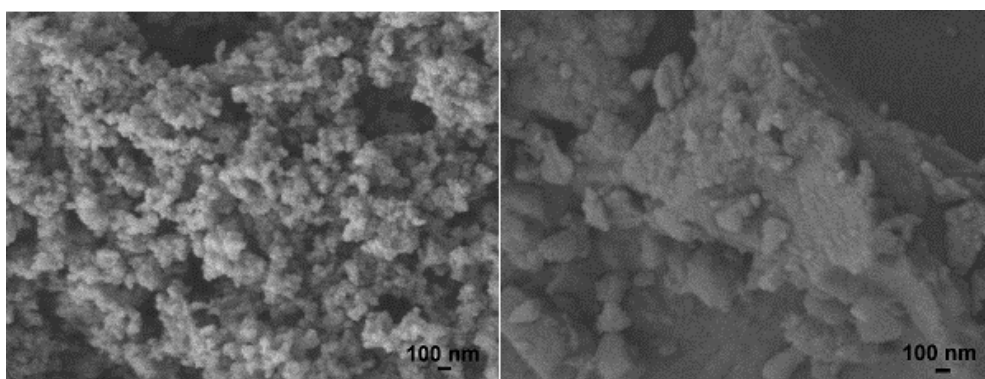


Fig. S5 FE-SEM images of LHP-2 (left) and LHP-3 (right).

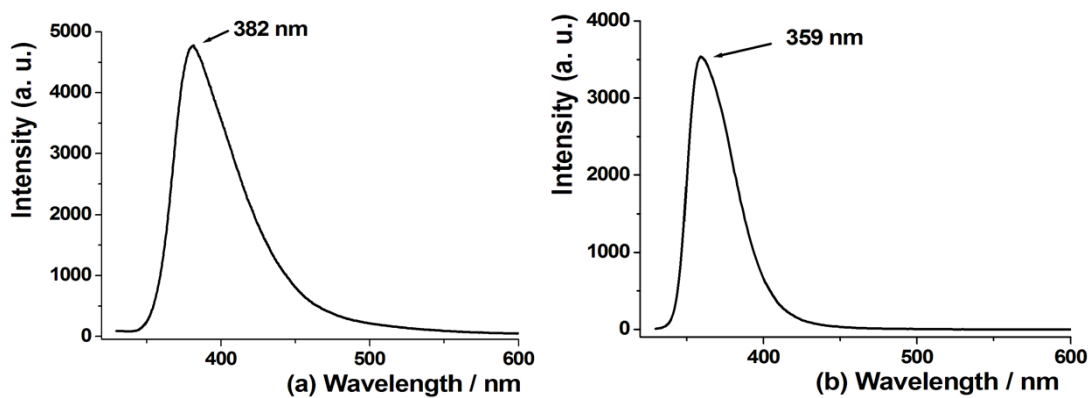


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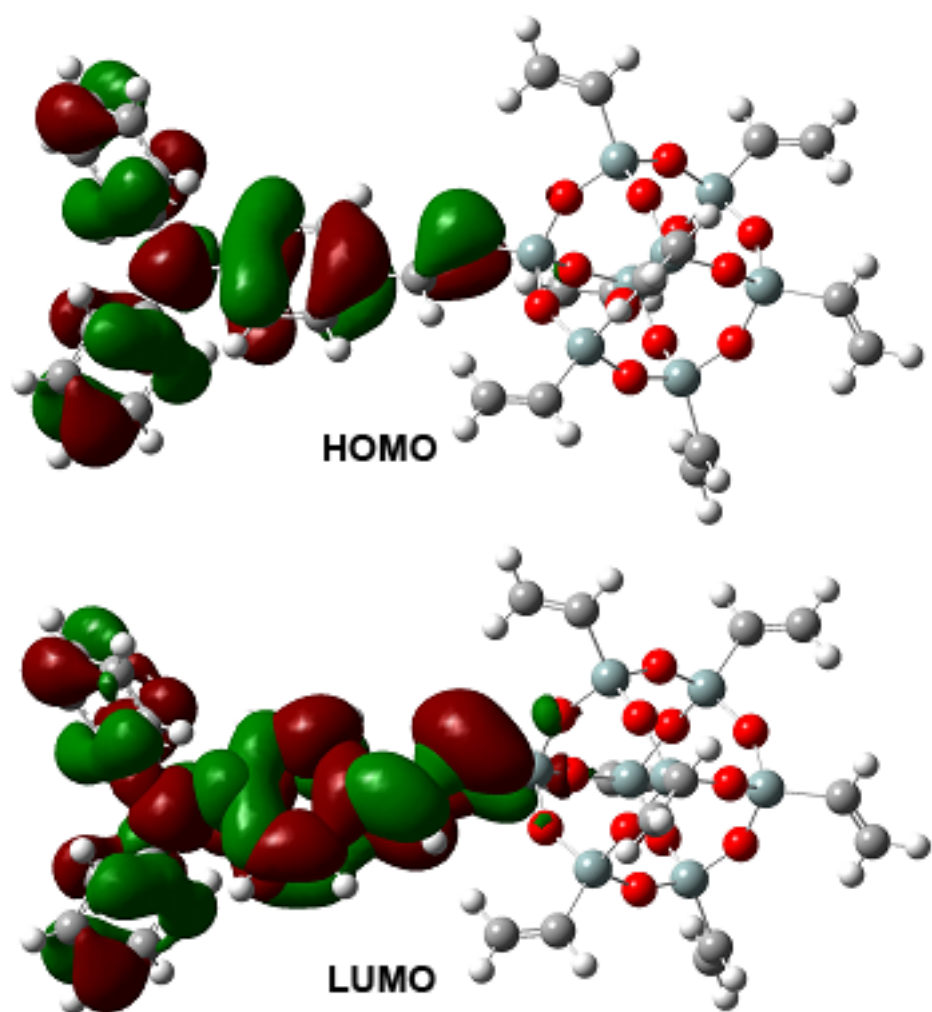


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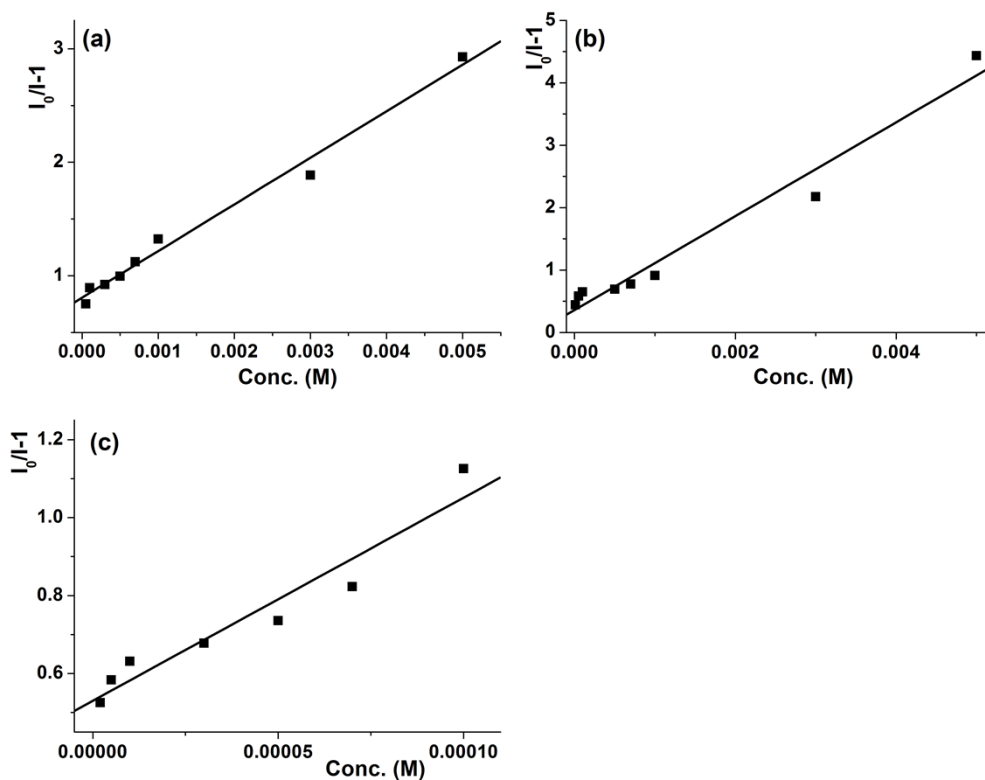


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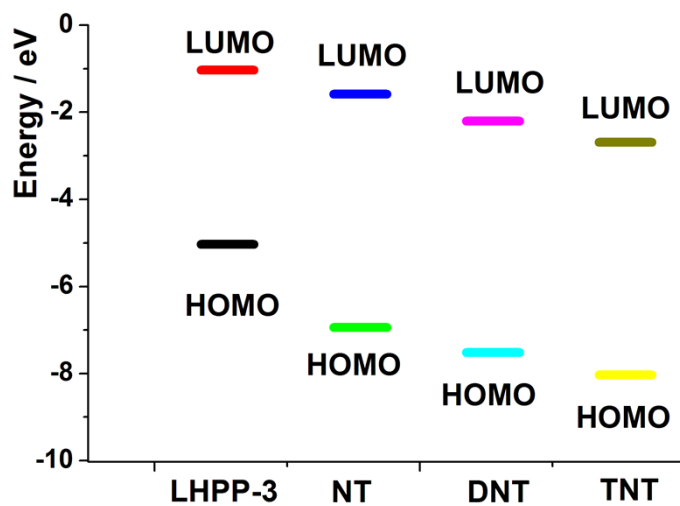


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Table S1. HOMO and LUMO energies of LHPP-3, NT, DNT and TNT

MO energy / eV	LHPP-3	NT	DNT	TNT
HOMO	-5.55	-6.94	-7.51	-8.03
LUMO	-1.01	-1.58	-2.20	-2.69

References

1. M. J. Frisch, G. W. Trucks, H. B. Schlegel, G. E. Scuseria, M. A. Robb, J. R. Cheeseman, J. A. Montgomery, Jr., T. Vreven, K. N. Kudin, J. C. Burant, J. M. Millam, S. S. Iyengar, J. Tomasi, V. Barone, B. Mennucci, M. Cossi, G. Scalmani, N. Rega, G. A. Petersson, H. Nakatsuji, M. Hada, M. Ehara, K. Toyota, R. Fukuda, J. Hasegawa, M. Ishida, T. Nakajima, Y. Honda, O. Kitao, H. Nakai, M. Klene, X. Li, J. E. Knox, H. P. Hratchian, J. B. Cross, C. Adamo, J. Jaramillo, R. Gomperts, R. E. Stratmann, O. Yazyev, A. J. Austin, R. Cammi, C. Pomelli, J. W. Ochterski, P. Y. Ayala, K. Morokuma, G. A. Voth, P. Salvador, J. J. Dannenberg, V. G. Zakrzewski, S. Dapprich, A. D. Daniels, M. C. Strain, O. Farkas, D. K. Malick, A. D. Rabuck, K. Raghavachari, J. B. Foresman, J. V. Ortiz, Q. Cui, A. G. Baboul, S. Clifford, J. Cioslowski, B. B. Stefanov, G. Liu, A. Liashenko, P. Piskorz, I. Komaromi, R. L. Martin, D. J. Fox, T. Keith, M. A. Al-Laham, C. Y. Peng, A. Nanayakkara, M. Challacombe, P. M. W. Gill, B. Johnson, W. Chen, M. W. Wong, C. Gonzalez, and J. A. Pople, Gaussian 03, Revision B.04 2003 (Gaussian, Inc.: Pittsburgh, PA).