

1 Nonylphenol polybenzoxazines derived nitrogen rich porous carbon (NRPC)
2 supported g-C₃N₄/Fe₃O₄ nanocomposite for an efficient high-performance
3 supercapacitor application

4 Kumar Selvaraj^{a,b,c*}, Bin Yu^{a*}, Marisa E. Spontón^{b,c*}, Premnath Kumar^d, Uma Shankar
5 Veerasamy^e, Arunachalam Arulraj^f, Ramalinga Viswanathan Mangalaraja^{g,h*}, Zainab M.
6 Almarhoonⁱ, Shaban R. M. Sayedⁱ, Dinakaran Kannaiyan^j

7
8 ^aState Key Laboratory of Fire Science, University of Science and Technology of China, 96 Jinzhai
9 Road, Hefei, Anhui 230026, P. R. China.

10 ^bInstituto de Desarrollo Tecnológico para la Industria Química (INTEC), CONICET, Ruta
11 Nacional 168, Km. 0, Santa Fe, 3000, Argentina.

12 ^cFacultad de Ingeniería Química, Universidad Nacional del Litoral (UNL), Santiago del Estero
13 2829, Santa Fe, 3000, Argentina.

14 ^dCenter of Excellence on Catalysis and Catalytic Reaction Engineering (CECC), Department of
15 Chemical Engineering, Faculty of Engineering, Chulalongkorn University, Bangkok, 10330,
16 Thailand.

17 ^eDepartment of Mechanical Engineering, Chiang Mai University, Muang, Chiang Mai 50200,
18 Thailand.

19 ^fDepartamento de Electricidad, Facultad de Ingeniería, Universidad Tecnológica Metropolitana
20 (UTEM), Av. José Pedro Alessandri 1242, Ñuñoa, 7800002, Santiago, Chile.

21 ^gFaculty of Engineering and Sciences, Universidad Adolfo Ibáñez, Diagonal las Torres 2640,
22 Peñalolén 7941169, Santiago, Chile.

23 ^hVicerrectoría de Investigación e Innovación, Universidad Arturo Prat, Avenida Arturo Prat 2120,
24 Iquique 1110939, Chile.

25 ⁱDepartment of Chemistry, College of Science, King Saud University, P.O. Box 2455, Riyadh
26 11451, Saudi Arabia.

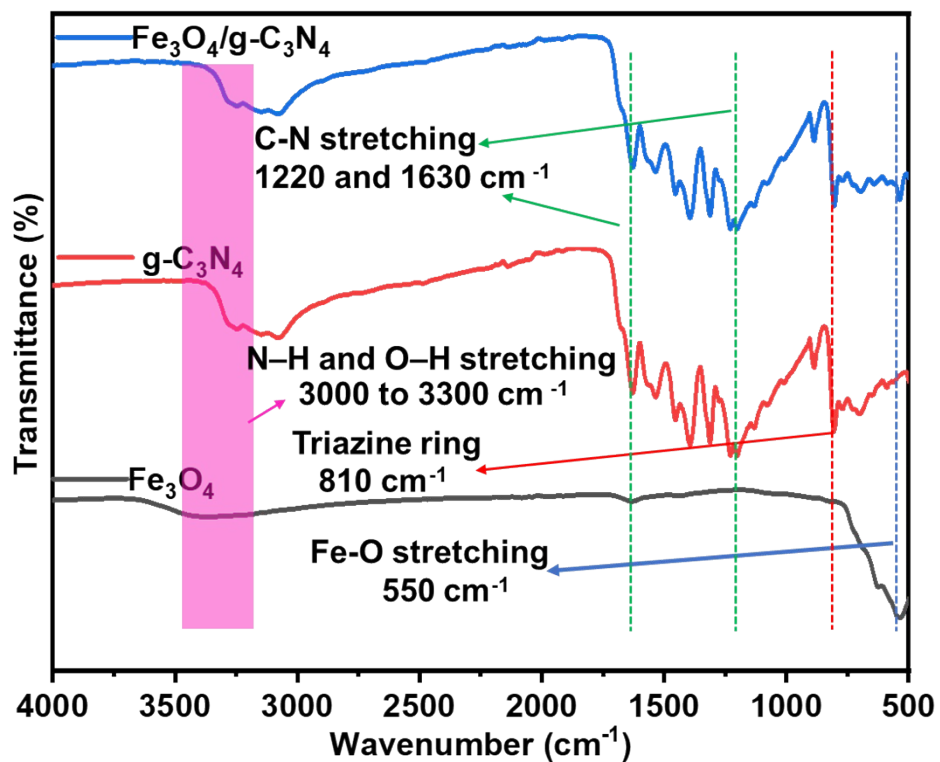
27 ^jDepartment of Chemistry, Thiruvalluvar University, Vellore – 632115, India.

28 Corresponding authors: yubin@ustc.edu.cn; skumar21393@gmail.com; [msponton@santafe-](mailto:msponton@santafe-conicet.gov.ar)
29 conicet.gov.ar; mangal@uai.cl

30 .

31 Supplementary material

32



33

34 **Figure S1.** FT-IR spectrum of Fe_3O_4 , $\text{g-C}_3\text{N}_4$ and $\text{Fe}_3\text{O}_4/\text{g-C}_3\text{N}_4$ composites.

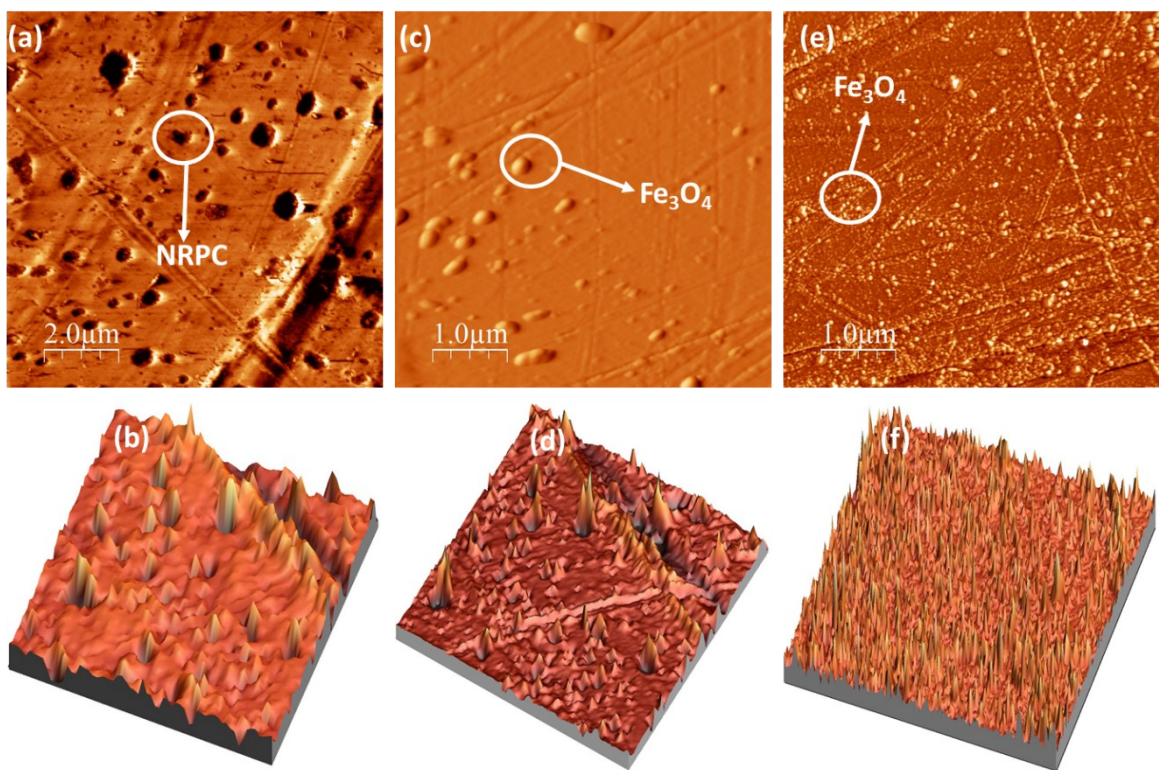


Figure S2. AFM images of (a) topography of NRPC, (b) 3D-topography of NRPC, (c) topography of Fe_3O_4 , (d) 3D-topography of Fe_3O_4 (e) topography of NRPC/g- $\text{C}_3\text{N}_4/\text{Fe}_3\text{O}_4$ composites (f) 3D-topography of NRPC/g- $\text{C}_3\text{N}_4/\text{Fe}_3\text{O}_4$ nanocomposites.