

Supporting Information File

Molecular Orientation and Femtosecond Charge Transfer Dynamics in Transparent and Conductive Electrodes Based on Graphene Oxide and PEDOT:PSS Composites

Bruno G.A.L. Borges,[†] Soheila Holakoei,[†] Matheus Felipe.F. Neves,[‡] Luana W. Menezes,[‡]

Carolina F. Matos,^{||} Aldo J.G. Zarbin,[§] Lucimara S. Roman,[‡] Maria Luiza M. Rocco*,[†]

[†]Institute of Chemistry, Federal University of Rio de Janeiro, Rio de Janeiro 21941-909, Brazil

[‡]Department of Physics, Federal University of Paraná, Curitiba 81531-990, Brazil

^{||} Federal University of Pampa, Caçapava do Sul, Rio Grande do Sul 96570-000, Brazil

[§] Department of Chemistry, Federal University of Paraná, Curitiba 81531-990, Brazil

*Corresponding author: Prof.Dr. Maria Luiza M. Rocco, Email: luiza@iq.ufrj.br

Bruno G.A.L. Borges Email: brunogabriel.rj@gmail.com

Soheila Holakoei Email: soheila.holakoei@iq.ufrj.br

Matheus Felipe.F. Neves Email: mneves@fisica.ufpr.br

Luana W. Menezes Email: luanawouk@gmail.com

Carolina F. Matos Email: carolafmatos@gmail.com

Aldo J.G. Zarbin Email: aldozarbin@ufpr.br

Lucimara S. Roman Email: lsroman@fisica.ufpr.br

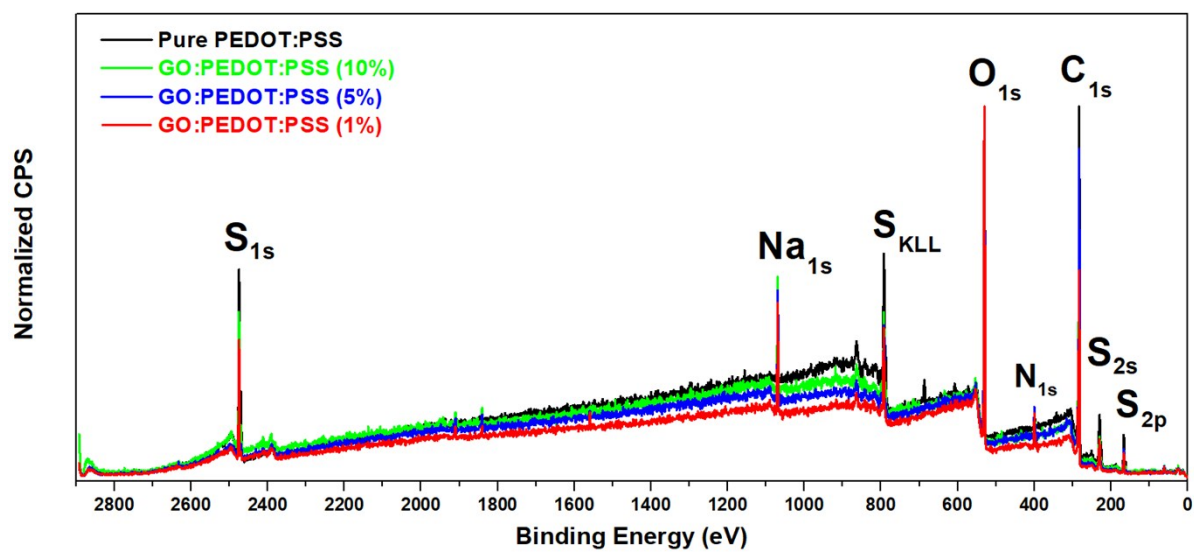


Figure S1: XPS survey spectra for GO:PEDOT:PSS 1%, 5%, 10% and pure PEDOT:PSS.

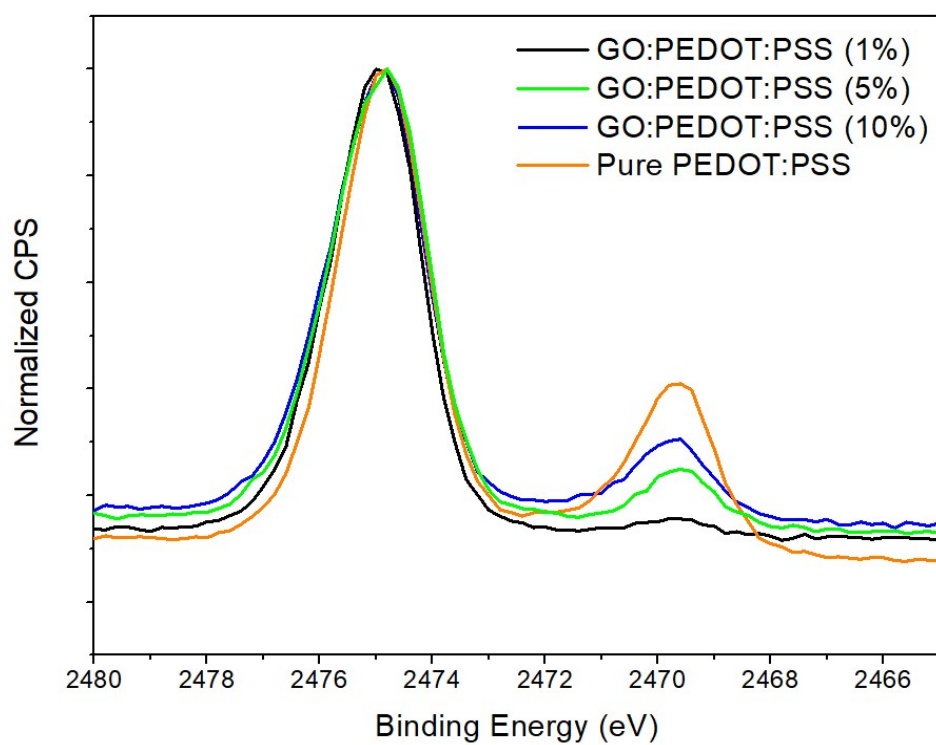


Figure S2: XPS detailed S_{1s} spectra for GO:PEDOT:PSS (1%, 5%, 10%) and pure PEDOT:PSS.

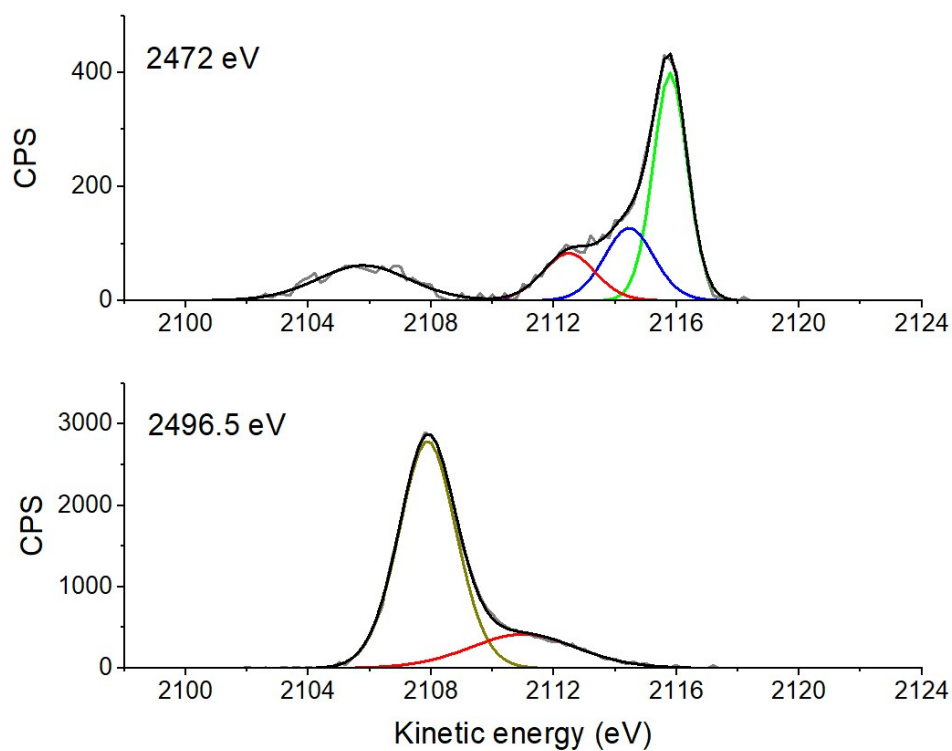


Figure S3: S $KL_{2,3}L_{2,3}$ Resonant Auger decay spectra for PEDOT:PSS 1% for incident photon energies of 2472 eV and 2496.5 eV.

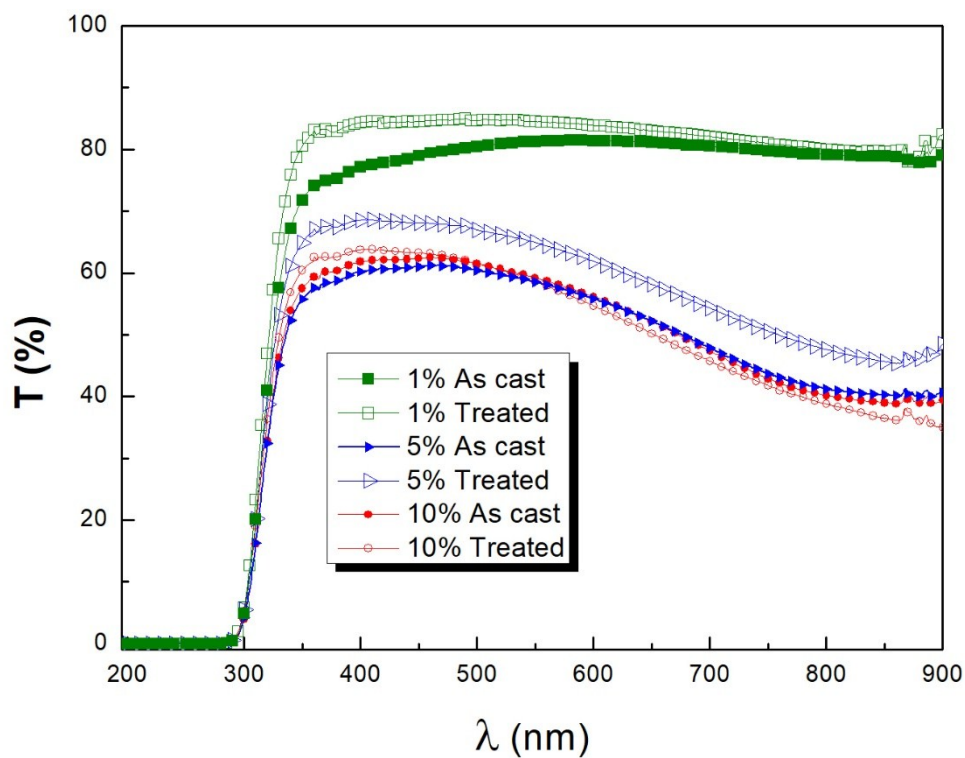


Figure S4: Transmittance spectra of PEDOT:PSS 1%, 5% and 10% samples before (as cast) and after solvent treatment (treated).

Table S1: Calculated peak areas for the π^* transitions observed in the S1s NEXAFS spectra of PEDOT.

IncidentAngle	GO:PEDOT:PSS			Pure PEDOT:PSS
	(1%)	(5%)	(10%)	(100%)
20°	2.40	0.85	0.44	1.50
90°	2.42	1.25	0.60	1.85
Δ (area)	0.02	0.40	0.16	0.35