Gmail

Rika Taslim <rikataslim@gmail.com>

Journal of Porous Materials: Invitation from Dr Komarneni to review a manuscript

1 message

Journal of Porous Materials <do-not-reply@springernature.com> Sun, Jun 26, 2022 at 7:56 AM
To: rikataslim@gmail.com

The contents of this email are confidential.

Ref: Submission ID c03ca918-77f1-4c19-bd19-8ef8f1fad25b

Dear Dr Taslim,

I'd like to invite you to review a manuscript for Journal of Porous Materials. You'll find the details appended underneath this email.

Please accept or decline the manuscript using the link below.

Kind regards,

Sridhar Komarneni
Editor
Journal of Porous Materials

To accept or decline the manuscript, please use this link:
https://reviewer-feedback.nature.com/review-invitation/15dee133-0380-4ca2-b434-80920653e725

If you wish to contact us about the manuscript, please email Subbulakshmi.Raman@springernature.com.

Submission details

Authors:
Gnanaprakash Dharmalingam, T. Manimekala, R. Sivasubramanian, S Karthikeyan

Title:
"Biomass derived activated carbon-based high-performance electrodes for supercapacitor applications"

Abstract:
Biomass-derived activated carbon (BDAC) has been prepared from a bio-source (peanut shells) and investigated as an electrode material for supercapacitors. The biomass-derived carbon was prepared by the hydrothermal method and activated using KOH. The material was characterized using a Transmission Electron Microscope (TEM), Scanning Electron Microscope (SEM), X-ray Diffraction (XRD) and Fourier Transform Infrared Spectroscopy (FTIR) respectively. The surface area of the prepared material was analysedusing Brunauer-Emmett-Teller (BET) technique. Electrochemical studies were carried out in both three and two-electrode configurations. From cyclic voltammetric (CV) studies, the electrical double layer capacitance (EDLC) behavior of the electrode was analysed. The specific capacitance estimated from galvanostatic charge-discharge(GCD) studies was 247 F/g at a current density of 0.25 A/g. Kinetic studies revealed more of a capacitive contribution to the diffusion component. A symmetric supercapacitor was fabricated in a Swagelok cell and the device characteristics were analysed. The cell voltage was found to be 0 – 1 V and the specific capacitance estimated from GCD was found to be 98 F/g at a current density of 0.25 A/g. Finally, cyclic stability studies were carried out for 5000 cycles and remarkable capacitance retention of 90% and 94.26% was obtained in the three and two-electrode configurations respectively, the changes at the electrode-electrolyte interface were analysed by electrochemical impedance spectroscopy (EIS).

To accept or decline the manuscript, please use this link:
https://reviewer-feedback.nature.com/review-invitation/15dee133-0380-4ca2-b434-80920653e725

Reviewing for Journal of Porous Materials

Journal of Porous Materials is committed to providing a rapid and fair review process. So, if you decide to accept the

manuscript, we would hope to receive your report at your earliest convenience.

The editorial board and publishing team of Journal of Porous Materials are not able to anticipate all potential competing interests, so we ask you to draw our attention to anything that might affect your review, and to decline submissions where it may be hard to remain objective.

If you would prefer us not to contact you in the future, please let us know by emailing Subbulakshmi.Raman@springernature.com.

Gmail

Rika Taslim <rikataslim@gmail.com>

Journal of Porous Materials: Thank you for your review on Biomass derived activated carbon-based high-performance electrodes for supercapacitor applications

1 message

Journal of Porous Materials <Subbulakshmi.Raman@springernature.com> Wed, Jul 13, 2022 at 9:54 PM
To: rikataslim@gmail.com

Ref: "Biomass derived activated carbon-based high-performance electrodes for supercapacitor applications"

Dear Dr Rika Taslim,

Thank you for submitting your report to Journal of Porous Materials. We greatly value the time and effort you put into reviewing the manuscript.

We've attached a copy of the report for your reference. You can also use this email to verify your review activity with third party websites, such as Publons.

Thanks again for your review; we'll email you the decision on the manuscript as soon as it is made. Meanwhile, we hope that we can continue to benefit from your expertise in the future.

Kind regards,

Editorial Assistant
Journal of Porous Materials

Your review report for Journal of Porous Materials.pdf
64K