
Reminder: Energy Sources, Part A: Recovery, Utilization, and Environmental Effects

1 pesan

Energy Sources, Part A: Recovery, Utilization, and Environmental Effects

4 November 2022 pukul

<onbehalf@manuscriptcentral.com>

13.46

Balas Ke: ueso-peerreview@journals.tandf.co.uk

Kepada: erman.taer@lecturer.unri.ac.id

04-Nov-2022

Dear Dr Erman Taer:

Recently, you received a decision on Manuscript ID UESO-2022-1514, entitled "Sustainable development of biomass-derived activated carbon through chemical and physical activations and its effect on the physicochemical and electrochemical activity." This e-mail is simply a reminder that your revision is due in two weeks. If it is not possible for you to submit your revision within two weeks, we will consider your paper as a new submission.

Please see a copy of the decision letter below which contains details of how to submit your revision and any comments from the editor/reviewers:

20-Jul-2022

Dear Dr Erman Taer:

Your manuscript entitled "Sustainable development of biomass-derived activated carbon through chemical and physical activations and its effect on the physicochemical and electrochemical activity" which you submitted to Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, has been reviewed. The reviewer comments are included at the bottom of this letter.

The reviewer(s) would like to see some revisions made to your manuscript before publication. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript.

When you revise your manuscript please highlight the changes you make in the manuscript by using the track changes mode in MS Word or by using bold or colored text.

In accordance with our format-free submission policy, an editable version of the article must be supplied at the revision stage. Please submit your revised manuscript files in an editable file format.

When you submit your revision, please also provide your response to the reviewer comments as a separate "Supplementary Material - for review" source file.

To submit a revision, go to <https://rp.tandfonline.com/submission/flow?submissionId=223548612&step=1>. If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript.

If you have any questions or technical issues, please contact the journal's editorial office at ueso-peerreview@journals.tandf.co.uk.

Because we are trying to facilitate timely publication of manuscripts submitted to Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, your revised manuscript should be uploaded as soon by 17-Nov-2022. Please contact our editorial office at ueso-peerreview@journals.tandf.co.uk if you are in need of an extension.

Changing the author list for a revision is rare and requires two criteria be met. First, every author being added or removed must provide their agreement for the change. Second, each author who is being added must also explain why they meet the definition of authorship for this paper in detail and elaborate on specific areas of the research they contributed to. This definition is given at <https://authorservices.taylorandfrancis.com/defining-authorship/>. Any requested changes in the order of the author list also require the agreement of all authors and an explanation of why the changes are necessary. If you need to change your paper's author list, please email all necessary

agreements and explanations to the handling editor.

Once again, thank you for submitting your manuscript to Energy Sources, Part A: Recovery, Utilization, and Environmental Effects and I look forward to receiving your revision.

Sincerely,

Professor Nižetić

University of Split Faculty of Electrical Engineering Mechanical Engineering and Naval Architecture

Editor-in-Chief, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects

snizetic@fesb.hr

Comments from the Editor and Reviewers:

Editor remarks:

- 1) Present similarity index (35%, iThenticate) must be reduced to not more than 20% with not more than 3% from a source,
- 2) The novelty of the work must be clearly addressed and discussed, compare your research with existing research findings and highlight novelty, (compare your work with existing research findings and highlight novelty),
- 3) Quality of the figures must be improved,
- 4) The main objective of the work must be written on the more clear and more concise way at the end of introduction section,
- 5) Introduction section must be written on more quality way, i.e. more up-to-date references addressed. Research gap should be delivered on more clear way with directed necessity for the conducted research work,
- 6) Conclusion section is missing some perspective related to the future research work, quantify main research findings,
- 7) English language should be carefully checked and carefully check paper for language typos,
- 8) Any authorship changes will need to have a specific, valid reason for the update that will be evaluated by the Editor according to journal defining authorship guidelines.

Reviewer: 1

Comments to the Author

The manuscript (UESO-2022-1514) entitled "Sustainable development of biomass-derived activated carbon through chemical and physical activations and its effect on the physicochemical and electrochemical activity" by Taslim et. al. reported the synthesis of activated carbon derived from biomass waste coffea canephora leaf via chemical activation and pyrolysis procedures.

The work presented here is interesting and deserve publishing. However, several major issues need to be addressed before it can be accepted:

(1) In 2.1 Activated carbon preparation, '...which subsequent by the physical activation at 850 °C for 2.5 hrs under CO₂ gas atmosphere...' What is the purpose of using CO₂?
Usually inert gas such as nitrogen is used, isn't it?

(2) In Table 2. The specific capacitance of the CCLs samples in 1M H₂SO₄ and 1M Na₂SO₄, usually the specific capacitance is measured either in H₂SO₄ or KOH, why do it using Na₂SO₄? Why not KOH?

(3) For activated porous carbon materials derived from bio-precursors, yield is very important and should be reported for product obtained under different preparation conditions.

(4) The preparation of bio-based carbon via chemical activation using potassium hydroxide have been reported previously. See:

Nanomaterials 2020, 10, 1765; doi:10.3390/nano10091765

Journal of Materials Chemistry A, 2017, 5, 12958-12968.

RSC Advances, 2018, 8, 3869 -3877. RSC Advances, 2018, 8, 42405–42414.

The major difference in this work is that the authors used the Coffea canephora leaf (CCL) waste as precursors. The above mentioned papers are very relevant and should be cited. Thus in Table 3, the results in above mentioned papers should also be listed in the table and compared.

(5) In Figure 5. GCD curves of the CCLs samples. Usually the GCD curves should be symmetrical or close to symmetrical. Why the GCD curves in Figures 5 are all asymmetrical?

Reviewer: 2

Comments to the Author

Dear Authors

work on Coffea canephora leaf (CCL) waste is appreciable and it is need for the day. But some important points were lacking in the manuscript. I suggested below. Kindly answer that.

1. Page no 2, line no 15, pyrolysis should be pyrolysis
 2. In page 5, line no 38-42 is not properly arranged. It gives different meanings. Correct the grammar
 3. Why precarbonization carried out without N₂ it might induce oxygen drastically and also some lignocellulosic content might lost during this step. Give explanation
 4. Why 48 hours long process is chosen. There some papers just go to carbonization, explain this
 5. Why Standard KOH was not used, or the results were bad? Explain this
 6. Why XRD shows peak at 30 degree instead 27 corresponding to carbon, Explain this
 7. Kindly provide TGA plot of the precursor which is crucial to understand the degradation
 8. Kindly provide TEM image
 9. Kindly provide EDAX elemental ratios
 10. Kindly provide Nyquist plots
 11. Check the grammar error throughout the manuscript
 12. Some important references were missing, for ex: (a) Journal of Energy Storage 52 (2022): 104776. (b) Journal of Energy Storage 52 (2022): 104928. (c) Journal of Energy Storage 34 (2021): 102229. (d) Critical Reviews in Solid State and Materials Sciences (2022): 1-56. (e) Frontiers in Energy Research (2021): 519. (f) Biomass Conversion and Biorefinery 11, no. 4 (2021): 1311-1323.
- Kindly add above references

Reviewer: 3

Comments to the Author

In this manuscript, the authors reported high capacitive electrode material from Coffea canephora leaf (CCL) waste via chemical activation and straightforward pyrolysis procedures. The optimal the CCL-0.3 has a maximum specific energy of 41.25 Wh kg⁻¹ at specific power of 657.95 W kg⁻¹ in 1M H₂SO₄, and 30.56 Wh kg⁻¹ at specific power of 510.28 W kg⁻¹ in 1M Na₂SO₄. It is a well-written paper in general, and the textural and chemical composition of carbon is extraordinary due to the tunable doping and activating process. In addition, the resulting specific capacitance, energy density and power density values show satisfactory values compared with the literature. On the other hand, as noted below, the manuscript lacks certain critical discussion. More importantly, the crucial electrochemical analysis is not provided in the recent work. Therefore, I recommend the major revision of the current manuscript for publication in the Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. The following points should be addressed:

1. The abstract should be more concise to highlight the advantages of the preparation strategy and analytic approaches because the advantages of your work are not clear.
2. The introduction part should be extended to upgrade the importance of this work and the novelty of the paper should be clearly stated.
3. The thickness of working electrodes should be included in the manuscript? It is suggested that the authors provide the volumetric capacitive performance of the doped carbon electrodes
4. The production yield of carbon materials should be calculated and included in the manuscript
5. It should provide the cycling performance, such as 10000 cycles
6. The electrochemical impedance analysis (EIS) should be done and demonstrate
7. What's more, the author should explain clearly the relationship between the pore texture and electrochemical properties. I kindly suggest the textural properties (N₂ adsorption-desorption isotherm, the BET surface area, etc.) of materials should be included in the revised manuscript. This is an especially critical requirement for double-layer capacitance behavior.
8. According to the literature, different well-ordered porous carbons were prepared via similar activating agents. Please, compare textural and electrochemical properties with those carbon materials. For example, A) <https://doi.org/10.1016/j.fuel.2022.125119> B) <https://doi.org/10.1021/acs.energyfuels.1c04208> C) <https://doi.org/10.1021/acsaem.1c00502>

If you have any questions or experience any difficulties submitting your revised manuscript, please contact the journal's editorial office at ueso-peerreview@journals.tandf.co.uk.

Sincerely,

Melissa Wilkinson

Energy Sources, Part A: Recovery, Utilization, and Environmental Effects Editorial Office
ueso-peerreview@journals.tandf.co.uk

223548612.R1 (Energy Sources, Part A: Recovery, Utilization, and Environmental Effects) A revise decision has been made on your submission

1 pesan

Energy Sources, Part A: Recovery, Utilization, and Environmental Effects

13 Desember 2022 pukul

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16.17

Balas Ke: snizetic@fesb.hr

Kepada: erman.taer@lecturer.unri.ac.id

13-Dec-2022

Dear Dr Erman Taer:

Your manuscript entitled "Sustainable development of biomass-derived activated carbon through chemical and physical activations and its effect on the physicochemical and electrochemical activity" which you submitted to Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, has been reviewed. The reviewer comments are included at the bottom of this letter.

The reviews are in general favorable and suggest that, subject to minor revisions, your paper could be suitable for publication. Please consider these suggestions, and I look forward to receiving your revision.

When you revise your manuscript please highlight the changes you make in the manuscript by using the track changes mode in MS Word or by using bold or colored text.

In accordance with our format-free submission policy, an editable version of the article must be supplied at the revision stage. Please submit your revised manuscript files in an editable file format.

When you submit your revision, please also provide your response to the reviewer comments as a separate "Supplementary Material - for review" source file.

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Once again, thank you for submitting your manuscript to Energy Sources, Part A: Recovery, Utilization, and Environmental Effects and I look forward to receiving your revision.

Sincerely,

Professor Nižetić

University of Split Faculty of Electrical Engineering Mechanical Engineering and Naval Architecture

Editor-in-Chief, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects

snizetic@fesb.hr

Comments from the Editor:

Editor remarks:

Present similarity index (28%, iThenticate) must be reduced to not more than 20% with not more than 3% from a source.

Energy Sources, Part A: Recovery, Utilization, and Environmental Effects - Decision on Manuscript ID UESO-2022-1514.R2

1 pesan

Energy Sources, Part A: Recovery, Utilization, and Environmental Effects

2 Januari 2023 pukul

<onbehalf@manuscriptcentral.com>

03.21

Balas Ke: snizetic@fesb.hr

Kepada: erman.taer@lecturer.unri.ac.id

01-Jan-2023

Dear Dr Taer:

Ref: Sustainable development of biomass-derived activated carbon through chemical and physical activations and its effect on the physicochemical and electrochemical activity

Our referees have now considered your paper and have recommended publication in Energy Sources, Part A: Recovery, Utilization, and Environmental Effects. We are pleased to accept your paper in its current form which will now be forwarded to the publisher for copy editing and typesetting. The reviewer comments are included at the bottom of this letter.

You will receive proofs for checking, and instructions for transfer of copyright in due course.

The publisher also requests that proofs are checked and returned within 48 hours of receipt.

Thank you for your contribution to Energy Sources, Part A: Recovery, Utilization, and Environmental Effects and we look forward to receiving further submissions from you.

Sincerely,

Professor Nižetić

University of Split Faculty of Electrical Engineering Mechanical Engineering and Naval Architecture

Editor-in-Chief, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects

snizetic@fesb.hr