

مشخصات فردی

نام و نام خانوادگی: حامد آقامحمدی

نام پدر: نادعلی

تاریخ تولد: ۱۳۷۲/۲/۱

تلفن تماس: ۰۹۱۸۵۰۵۵۷۰۲

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اطلاعات شغلی

عنوان: عضو هیئت علمی-استادیار

دانشگاه/ سازمان: سازمان پژوهش‌های علمی و صنعتی ایران

پژوهشکده: پژوهشکده مواد و فناوری‌های نوین

افتخارات و جوایز

۱- قرار گرفتن در لیست پژوهشگران دو درصد برتر دنیا بر اساس سایت الزویر در سال ۲۰۲۴

۲- برگزیده جایزه البرز در سال ۱۴۰۱

۳- پژوهشگر برتر دانشگاه صنعتی خواجه نصیرالدین طوسی در سال ۱۴۰۰

۴- برگزیده جوایز تحصیلی بنیاد ملی نخبگان در سال‌های ۱۳۹۸-۱۴۰۰

۵- نفر اول معدل در مقطع دکتری

۶- نفر اول معدل در مقطع کارشناسی ارشد

سوابق دوره کارشناسی

رشته تحصیلی: مهندسی مواد / گرایش متالورژی صنعتی

دانشگاه: بوعلی سینا

تاریخ تحصیل: ۱۳۹۰/۷/۱ تا ۱۳۹۴/۶/۲۹

معدل: ۱۶/۹۷ (نفر چهارم ورودی سال ۹۰)

سوابق دوره کارشناسی ارشد

رشته تحصیلی: مهندسی مواد / گرایش شناسایی و انتخاب مواد مهندسی

دانشگاه: صنعتی خواجه نصیرالدین طوسی

تاریخ تحصیل: ۱۳۹۴/۷/۱ تا ۱۳۹۶/۶/۲۵

معدل: ۱۸/۴۴ (نفر اول ورودی سال ۹۴)

سوابق دوره دکتری

رشته تحصیلی: مهندسی مواد / گرایش شناسایی و انتخاب مواد مهندسی

دانشگاه: صنعتی خواجه نصیرالدین طوسی

تاریخ شروع تحصیل: ۱۳۹۷/۷/۱

مشارکت در پروژه‌های تحقیقاتی

۱- امکان سنجی اقتصادی، سنتز و مشخصه یابی نانوصفحات گرافن

۲- رسوخ فناوری نانو در ساخت و تولید باتری لیتیوم یون با استفاده از آیندهای پایه تیتانیومی نانوساختار

۳- دستیابی به دانش فنی ساخت نانوپوشش بر روی فوندانسیون های بتنی مورد استفاده در خطوط انتقال

عناوین مقالات انگلیسی

- 1- Khazaeli, Atousa, Abbas Montazeri, **Hamed Aghamohammadi**, and Reza Eslami-Farsani. "Comparative study of the effects of N-doped graphene and graphene oxide on enhancing silicon-based anodes for lithium-ion batteries." *Diamond and Related Materials* (2025): 112816.
- 2- Khazaeli, Atousa, Abbas Montazeri, **Hamed Aghamohammadi**, and Reza Eslami-Farsani. "Holey Graphene-Silicon Nanocomposites as Superior Anodes for Lithium-Ion Batteries with Excellent Rate Performance and Cyclic Stability." *Materials Chemistry and Physics* (2025): 131346.

- 3- **Hamed Aghamohammadi**, and Artemiz Khazaeli. "Recent advances in the development of the MXenes/Ti-based nanocomposite anode materials for Li-ion batteries: A review study." *Journal of Energy Storage* 101 (2024): 113851.
- 4- **Hamed Aghamohammadi**, Reza Eslami-Farsani, and Hesam Iranipour Oskouei. "Electrochemical performance of TiNb₂O₇/graphene/CNTs hybrid nanocomposites as anode materials for Li-ion batteries." *Diamond and Related Materials* 141 (2024): 110654.
- 5- Pishgahinejad, Sara, **Hamed Aghamohammadi**, and Nafiseh Hassanzadeh. "Copper-coated graphite electrodes for the facile preparation of copper oxide particles anchored on functionalized holey graphene sheets." *Journal of Electroanalytical Chemistry* 931 (2023): 117204.
- 6- **Hamed Aghamohammadi**, and Reza Eslami-Farsani. "Synthesis and electrochemical performance of TiNb₂O₇ nanoparticles grown on electrochemically prepared graphene as anode materials for Li-ion batteries." *Journal of Power Sources* 535, 2022, 231418.
- 7- **Hamed Aghamohammadi**, Nafiseh Hassanzadeh, and Reza Eslami-Farsani. "A comprehensive review study on pure titanium niobium oxide as the anode material for Li-ion batteries." *Journal of Alloys and Compounds*, 2022, 165117.
- 8- **Hamed Aghamohammadi**, and Reza Eslami-Farsani. "Effects of calcination parameters on the purity, morphology, and electrochemical properties of the synthesized TiNb₂O₇ by the solvothermal method as anode materials for Li-ion batteries." *Journal of Electroanalytical Chemistry*, 2022, 116394.
- 9- Hesam Iranipour Oskouei, **Hamed Aghamohammadi**, and Reza Eslami-Farsani. "Electrochemical performance of TiNb₂O₇ nanoparticles anchored with different contents of MWCNTs as anode materials for Li-ion batteries." *Ceramics International* 48(10), 2022, 14717-14725.
- 10- **Hamed Aghamohammadi**, Reza Eslami-Farsani, and Elizabeth Castillo-Martinez. "Recent trends in the development of MXenes and MXene-based composites as anode materials for Li-ion batteries." *Journal of Energy Storage* 2021, 103572.
- 11- **Hamed Aghamohammadi**, Nafiseh Hassanzadeh, and Reza Eslami-Farsani. "A review study on the recent advances in developing the heteroatom-doped graphene and porous graphene as superior anode materials for Li-ion batteries." *Ceramics International* 47(16), 2021, 22269-22301.
- 12- **Hamed Aghamohammadi**, and Akbar Heidarpour. "Morphological evolution of TiC particles with different stoichiometries by hydrofluoric acid etching treatment." *International Journal of Applied Ceramic Technology* 18(4), 2021, 1192-1204.
- 13- **Hamed Aghamohammadi**, Nafiseh Hassanzadeh, and Reza Eslami-Farsani. "A review study on titanium niobium oxide-based composite anodes for Li-ion batteries: Synthesis, structure, and performance." *Ceramics International* 47(19), 2021, 26598-26619.
- 14- **Hamed Aghamohammadi**, Nima Amousa, and Reza Eslami-Farsani. "Recent advances in developing the MXene/polymer nanocomposites with multiple properties: A review study." *Synthetic Metals* 273, 2021, 116695.
- 15- Akbar Heidarpour, **Hamed Aghamohammadi**, and Mehdi Pourabdoli. "A Comparative Study on the Shape Evolution of the TiC Particles in Ti–C, Ti–Al–C, and Ti–Si–C Systems after HF Treatment." *Protection of Metals and Physical Chemistry of Surfaces* 57(6), 2021, 1191-1197.

- 16- **Hamed Aghamohammadi**, Meisam Bakhtiari, and Reza Eslami-Farsani. "An experimental investigation on the synthesis of fluorographene by electrochemical method in the mixture of sulfuric and hydrofluoric acid electrolytes, *Ceramics International*, 46(16), 2020, 25189-25199
- 17- **Hamed Aghamohammadi**, Reza Eslami-Farsani, Mahdi Torabian, Nima Amousa, Recent advances in one-pot functionalization of graphene using electrochemical exfoliation of graphite: A review study, *Synthetic Metals*, 269, 2020, 116549.
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- 19- Akbar Heidarpour, **Hamed Aghamohammadi**, Samad Ghasemi, Structural and morphological characterization of the layered carbide-derived-carbon nanostructures obtained by HF etching of Ti_2AlC , *synthetic metals*, 267, 2020, 116478.
- 20- Romina Keshavarz, **Hamed Aghamohammadi**, Reza Eslami-Farsani, The effect of graphene nanoplatelets on the flexural properties of fiber metal laminates under marine environmental conditions, *International Journal of Adhesion and Adhesives*, 2020, 102709.
- 21- **Hamed Aghamohammadi**, Reza Eslami-Farsani, An experimental investigation on the sulfur and nitrogen co-doping and oxidation of prepared graphene by electrochemical exfoliation of pencil graphite rods, *Ceramics International*, 46(18), 2020, 28860-28869.
- 22- Reza Eslami-Farsani, **Hamed Aghamohammadi**, S.M.R. Khalili, Hossein Ebrahimnezhad-Khaljiri, Hamid Jalali, Recent trend in developing advanced fiber metal laminates reinforced with nanoparticles: A review study, *Journal of industrial textiles*, 2020, 1528083720947106.
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- 24- S. N. Hosseini Abbandanak, **H. Aghamohammadi**, E. Akbarzadeh, N. Shabani, R. Eslami-Farsani, M. Kangooie, M. Hossein Siadati, Morphological/SAXS/WAXS studies on the electrochemical synthesis of graphene nanoplatelets, *Ceramics International*, 45(16), 2019, 20882-20890.
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- 26- Akbar Heidarpour, **Hamed Aghamohammadi**, Rasoul Jamshidi, Samad Ghasemi, The shape evolution of the prepared TiC_x from mechanical alloying of the Ti-Al-C system after HF treatment, *Ceramics International*, 45 (4), 2019, 4653-4660.
- 27- **Hamed Aghamohammadi**, Akbar Heidarpour, Rasoul Jamshidi, Omid Bayat, Tribological behavior of epoxy composites filled with nanodiamond and Ti_3AlC_2 -TiC particles: A comparative study, *Ceramics International*, 45(7), 2019, 9106-9113.
- 28- **Hamed Aghamohammadi**, Akbar Heidarpour, Rasoul Jamshidi, Samad Ghasemi, Study on the chemical stability of the synthesized TiC_x in Ti-Al-C system after immersion in the $\text{HF} + \text{H}_2\text{O}_2$ solution, *Advanced powder technology*, 30(2), 2019, 393-398.

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- 30- M. Emami Mehr, **Hamed Aghamohammadi**, S. Navid Hosseini Abbandanak, Gh.R. Aghamirzadeh, Reza Eslami-Farsani, S. M. Hossein Siadati, Effects of applying a combination of surface treatments on the mechanical behavior of basalt fiber metal laminates, International Journal of Adhesion and Adhesives, 92, 2019, 133-14.
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- 33- Arash Fattah-Alhosseini, **Hamed Aghamohammadi** and Ali Bashiri Safa, Electrochemical Behavior Assessment of Alloy 22 (UNS N06022) in Hydrochloric Acid Solutions by Electrochemical Impedance Spectroscopy and Mott–Schottky Analyses, Analytical & bioanalytical Electrochemistry, 2015