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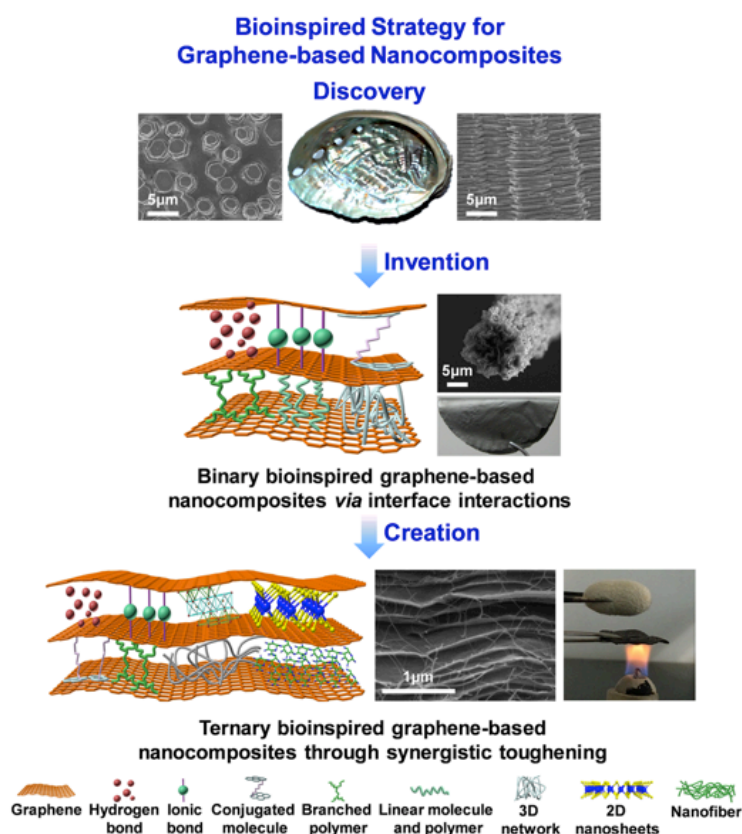


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## Bioinspired graphene-based nanocomposites



With its extraordinary properties as the strongest and stiffest material ever measured and the best-known electrical conductor, graphene could have promising applications in many fields, especially in the area of nanocomposites. However, processing graphene-based nanocomposites is very difficult. So far, graphene-based nanocomposites exhibit rather poor properties. Nacre, the gold standard for biomimicry, provides an excellent example and guidelines for assembling two-dimensional nanosheets into high performance nanocomposites. The inspiration from nacre overcomes the bottleneck of traditional approaches for constructing nanocomposites, such as poor dispersion, low loading, and

weak interface interactions. Herein, we summarize recent research on graphene-based artificial nacre nanocomposites,[1-6] and focus on the design of interface interactions and synergistic effects for constructing high performance nanocomposites.

#### References

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