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Graphical Abstracts/Chin Chem Lett 29 (2018) iii-xviii

Speical Column: Surface chemistry connecting heterogeneous catalysis, photocatalysis and plasmonic catalysis

Editorial

Surface chemistry connecting heterogeneous catalysis, photocatalysis and plasmonic catalysis

Chinese Chemical Letters 29 (2018) 725

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Reviews

Hot electron generation on metal catalysts under surface reaction: Principles, devices, and application

Chinese Chemical Letters 29 (2018) 727

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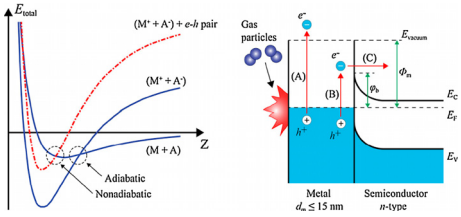
Transfer of charge through metal-support interfaces leads to an increase in the activity of mixed catalysts. In this review, we consider the main aspects of research aimed at studying processes that create and allow interphase transfer of highly excited (hot) charge carriers in supported catalysts, and discuss the effect of these phenomena on catalytic activity.



Photocatalytic carbon dioxide reduction by photocatalyst innovation

Chinese Chemical Letters 29 (2018) 734

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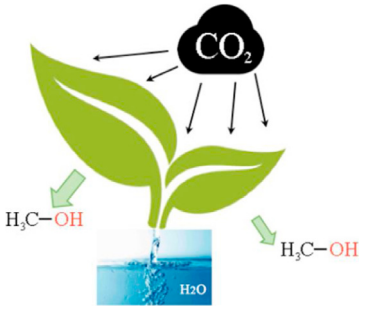
The photocatalytic conversion of carbon dioxide into sustainable fuel methanol using carbon quantum dots is highlighted in this paper. The multifaceted roles of carbon quantum dots in photocatalytic reactions and future directions of CQD materials are outlined.



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Communications