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# CHEMICAL REVIEWS

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The top-left panel, titled 'Templated Synthesis' (p 7487), shows the anodization of aluminum (Al) to form porous anodic aluminum oxide (AAO). Below this, a central AAO template is surrounded by eight synthesis methods: Chemical vapor deposition, Atomic layer deposition, Template wetting, Mask technique, Electro-chemical deposition, Electro-less deposition, Sol-Gel deposition, and Surface modification.

The top-right panel, titled 'Molecular Recognition' (p 7678), features a central 3D molecular model of a ring-shaped structure. Surrounding it are several chemical structures, including a complex polycyclic molecule, a cyclic molecule with a phosphate group, a cyclic molecule with multiple hydroxyl groups, and a cyclic molecule with a phosphate group and a hydroxyl group.

The bottom-left panel, titled 'Nanowire Architectures' (p 7557), illustrates three types of nanowire structures: interpenetrated 3-fold (INT) 2D + 2D, polycatenated inclined (ICAT), and polycatenated parallel (PCAT).

The bottom-right panel, titled 'Sandwich Structures' (p 7631), shows a central 3D molecular model of a sandwich structure. The background features a rainbow, a globe, and a lightning bolt.

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[dx.doi.org/10.1021/cr400686j](https://doi.org/10.1021/cr400686j)

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[dx.doi.org/10.1021/cr4007335](https://doi.org/10.1021/cr4007335)

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**Recent Development of Sandwich Assay Based on the Nanobiotechnologies for Proteins, Nucleic Acids, Small Molecules, and Ions**

Juwen Shen, Yuebin Li, Haoshuang Gu, Fan Xia,\* and Xiaolei Zuo\*

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[dx.doi.org/10.1021/cr400035j](https://doi.org/10.1021/cr400035j)

**Synthesis and Applications of Carbohydrate-Derived Macrocyclic Compounds**

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[dx.doi.org/10.1021/cr400295a](https://doi.org/10.1021/cr400295a)

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Qingxin Mu, Guibin Jiang, Lingxin Chen, Hongyu Zhou, Denis Fourches, Alexander Tropsha, and Bing Yan\*

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