

# g-C<sub>3</sub>N<sub>4</sub>/brookite-TiO<sub>2-x</sub>N<sub>y</sub>光触媒のNO分解活性に及ぼすルチル相チタニアの影響

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## Effect of rutile TiO<sub>2</sub> on the photocatalytic performance of g-C<sub>3</sub>N<sub>4</sub>/brookite -TiO<sub>2-x</sub>N<sub>y</sub> photocatalyst for NO decomposition

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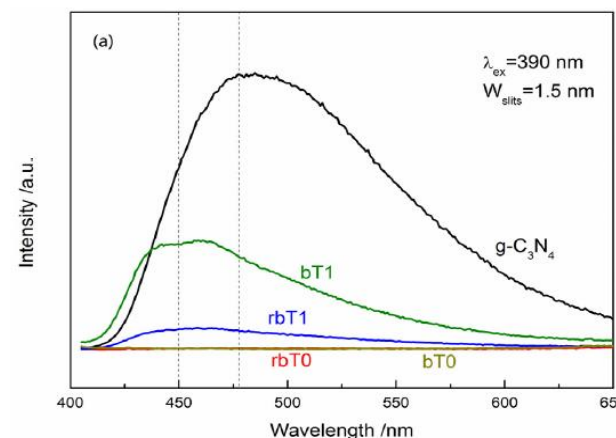


Figure1. Photoluminescence (PL) spectra of the as-prepared g-C<sub>3</sub>N<sub>4</sub>, and the composite type samples

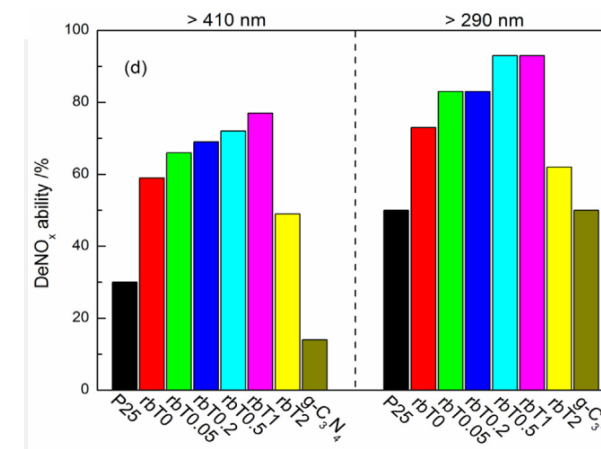


Figure2. Photocatalytic degradation abilities of NO (deNO<sub>x</sub>) on different samples.

ソルボサーマル反応によってブルカイト相窒素ドーパ酸化チタン/g-C<sub>3</sub>N<sub>4</sub>コンポジット光触媒を合成した。ルチル相の存在によって電荷分離が促進され、紫外線や可視光照射下では最も高いDeNO<sub>x</sub>光触媒活性を実現した。

A series of brookite based TiO<sub>2-x</sub>N<sub>y</sub> and g-C<sub>3</sub>N<sub>4</sub> composite type photocatalysts were successfully obtained by a facile solvothermal method. The photocatalyst composed with mixed brookite and rutile and g-C<sub>3</sub>N<sub>4</sub> promotes the charge transfer and shows the highest activity in photodegradation of NO<sub>x</sub> under both UV and visible light irradiation.