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**a. Highlights in 2007**

1. Cellulose saccharification by carbon-based solid acid catalyst

Amorphous carbon with a high density of sulfonic acid groups exhibited remarkable catalytic performance for hydrolysis of cellulose.

2. n-type amorphous carbon semiconductor

Thermal decomposition of organic compounds containing nitrogen results in n-type amorphous carbon semiconductor

**b. Articles (original article, comment/book)**

1. Environmentally benign production of chemicals and energy using a carbon-based strong solid acid.

Nakajima, Kiyotaka; Hara, Michikazu; Hayashi, Shigenobu.

Journal of the American Ceramic Society, (2007), 90(12), 3725-3734

2. Lanthanum-indium oxysulfide as a visible light driven photocatalyst for water splitting

Ogisu K (Ogisu, Kiyonori), Ishikawa A (Ishikawa, Akio), Teramura K (Teramura, Kentaro), Toda K (Toda, Kenji), Hara M (Hara, Michikazu), Domen K

CHEMISTRY LETTERS

Volume: 36 Issue: 7 Pages: 854-855

3. Hydrothermal synthesis of fine NaTaO<sub>3</sub> powder as a highly efficient photocatalyst for overall water splitting

Lee Y (Lee, Yungi), Watanabe T (Watanabe, Tomoaki), Takata T (Takata, Tsuyoshi), Hara M (Hara, Michikazu), Yoshimura M (Yoshimura, Masahiro), Domen K (Domen, Kazunari)

BULLETIN OF THE CHEMICAL SOCIETY OF JAPAN

Volume: 80 Issue: 2 Pages: 423-428

4. Zinc and titanium spinel oxynitride (Zn<sub>x</sub>TiO<sub>y</sub>N<sub>z</sub>) as a d(0)-d(10) complex photocatalyst with visible light activity

Hisatomi T (Hisatomi, Takashi), Hasegawa K (Hasegawa, Kazuya), Teramura K (Teramura, Kentaro), Takata T (Takata, Tsuyoshi), Hara M (Hara, Michikazu), Domen K (Domen, Kazunari) CHEMISTRY

LETTERS

Volume: 36 Issue: 4 Pages: 558-559

5. Modification of  $(\text{Zn}_{1+x}\text{Ge})(\text{N}_2\text{O}_x)$  solid solution as a visible light driven photocatalyst for overall water splitting

Lee YG (Lee, Yungi), Teramura K (Teramura, Kentaro), Hara M (Hara, Michikazu), Domen K (Domen, Kazunari)

CHEMISTRY OF MATERIALS Volume: 19 Issue: 8 Pages: 2120-2127

- 6 .Zinc germanium oxynitride as a photocatalyst for overall water splitting under visible light

Lee Y (Lee, Yungi), Terashima H (Terashima, Hiroaki), Shimodaira Y (Shimodaira, Yoshiki), Teramura K (Teramura, Kentaro), Hara M (Hara, Michikazu), Kobayashi H (Kobayashi, Hisayoshi), Domen K (Domen, Kazunari), Yashima M (Yashima, Masatomo)

JOURNAL OF PHYSICAL CHEMISTRY C Volume: 111 Issue: 2 Pages: 1042-1048

**c. Presentation in international/domestic conferences**

None