*表示通訊作者

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1	**Hsuan-Chung Wu***, Hsing-Hao Chen, Yu-Ren Zhu, "Effects of Al-Impurity Type on Formation Energy, Crystal Structure, Electronic Structure, and Optical Properties of ZnO by Using Density Functional Theory and the Hubbard-U Method", Materials, Vol. 9, p. 647 (11 pages), **2016**. **(第一作者與通訊作者)** (SCI 2015 Impact Factor = 2.728, Ranking: 63 / 271 = 23%)
2	Kuan-Yu Chu, Hsing-Hao Chen, Po-Han Lai, **Hsuan-Chung Wu***, Yung-Chang Liu, Chi-Cheng Lin, Muh-Jung Lu, "The Effects of Bottom Blowing Gas Flow Rate Distribution during the Steelmaking Converter Process on Mixing Efficiency", Metallurgical and Materials Transactions B, Vol. 47B, p. 948–962, **2016**. **(通訊作者)** (SCI 2015 Impact Factor = 1.474, Ranking: 20 / 73 = 27%)
3	Chieh-Cheng Chen, **Hsuan-Chung Wu***, "Electronic Structure and Optical Property Analysis of Al/Ga-Codoped ZnO through First-Principles Calculations", Materials, Vol. 9, p. 164 (9 pages), **2016**. **(通訊作者)** (SCI 2015 Impact Factor = 2.728, Ranking: 63 / 271 = 23%)
4	Chao-Kuang Cheng, Che-Hsien Lin, **Hsuan-Chung Wu**, Chen-Chi M Ma, Tsung-Kuang Yeh, Huei-Yu Chou, Chuen-Horng Tsai, Chien-Kuo Hsieh*, "The Two-Dimensional Nanocomposite of Molybdenum Disulfide and Nitrogen-Doped Graphene Oxide for Efficient Counter Electrode of Dye-Sensitized Solar Cells", Nanoscale Research Letters, Vol. 11, p. 117 (9 pages), **2016**. (SCI 2015 Impact Factor = 2.584, Ranking: 34 / 145 = 23%)
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7	Jong-Hong Lu*, Jen-Wei Luo, Zong-Han Syu, **Hsuan-Chung Wu**, "Optimizing the Design of Transparent Conductive Substrates", Journal of Vacuum Science & Technology A, Vol. 33, 061511 (7 pages), **2015**. (SCI 2015 Impact Factor = 1.724, Ranking: 7 / 18 = 39%)
8	Che-Hsien Lin, Chuen-Horng Tsai, Fan-Gang Tseng*, Yang-Yen Yu, **Hsuan-Chung Wu**, Chien-Kuo Hsieh*, "Low-Temperature Thermally Reduced Molybdenum Disulfide as a Pt-Free Counter Electrode for Dye-Sensitized Solar Cells", Nanoscale Research Letters, Vol. 10, p. 446 (10 pages), **2015**. (SCI 2015 Impact Factor = 2.584, Ranking: 34 / 145 = 23%)

9	Yu-Hsuan Wei, Ming-Chi Tsai, Chen-Chi M. Ma, **Hsuan-Chung Wu**, Fan-Gang Tseng, Chuen-Horng Tsai, Chien-Kuo Hsieh*, "Enhanced Electrochemical Catalytic Efficiencies of Electrochemically Deposited Platinum Nanocubes as a Counter Electrode for Dye-Sensitized Solar Cells", Nanoscale Research Letters, Vol. 10, p. 467 (8 pages), **2015**. (SCI 2015 Impact Factor = 2.584, Ranking: 34 / 145 = 23%)
10	Ming-Hsien Lee, Yen-Chun Peng, **Hsuan-Chung Wu***, "Effects of Intrinsic Defects on Electronic Structure and Optical Properties of Ga-doped ZnO", Journal of Alloys and Compounds, Vol. 616, p. 122–127, **2014**. **(通訊作者)** (SCI 2015 Impact Factor = 3.014, Ranking: 4 / 73 = 5%)
11	Huey-Jiuan Lin, **Hsuan-Chung Wu***, "Electronic Structure and Optical Properties of N/Si-Codoped Anatase TiO_2 Evaluated using First Principles Calculations", International Journal of Photoenergy, Volume 2014, Article ID 342132 (7 pages), **2014**. **(通訊作者)** (SCI 2015 Impact Factor = 1.226, Ranking: 57 / 90 = 63%)
12	Yih-Shing Lee, Yen-Chun Peng, Jong-Hong Lu, Yu-Ren Zhu, **Hsuan-Chung Wu***, "Electronic and Optical Properties of Ga-doped ZnO", Thin Solid Films, Vol. 570, p. 464–470, **2014**. **(通訊作者)** (SCI 2015 Impact Factor = 1.761, Ranking: 6 / 18 = 33%)
13	**Hsuan-Chung Wu***, Yu-Siang Lin, Syuan-Wei Lin, "Mechanism of Visible Light Photocatalysis in N-doped Anatase TiO_2 with Oxygen Vacancies from GGA + U Calculations", International Journal of Photoenergy, Vol. 2013, Article ID 289328 (7 pages), **2013**. **(第一作者與通訊作者)** (SCI 2015 Impact Factor = 1.226, Ranking: 57 / 90 = 63%)
14	C. S. Wu, D. L. Young*, **H. C. Wu**, "Simulations of Multidimensional Interfacial Flows by an Improved Volume-of-Fluid Method", International Journal of Heat and Mass Transfer, Vol. 60, p. 739–755, **2013**. (SCI 2015 Impact Factor = 2.857, Ranking: 10 / 135 = 7%)
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15	**Hsuan-Chung Wu***, Yen-Chun Peng, Chieh-Cheng Chen, "Effects of Ga Concentration on Electronic and Optical Properties of Ga-doped ZnO from First Principles Calculations", Optical Materials, Vol. 35, p. 509–515, **2013**. **(第一作者與通訊作者)** (SCI 2015 Impact Factor = 2.183, Ranking: 25 / 90 = 28%)
16	**Hsuan-Chung Wu***, Yen-Chun Peng, Tsu-Ping Shen, "Electronic and Optical Properties of Substitutional and Interstitial Si-doped ZnO", Materials, Vol. 5, p. 2088–2100, **2012**. **(第一作者與通訊作者)** (SCI 2015 Impact Factor = 2.728, Ranking: 63 / 271 = 23%)
17	**Hsuan-Chung Wu***, Sheng-Hong Li, Syuan-Wei Lin, "Effects of Fe Concentration on Fe-doped Anatase TiO_2 from GGA + U Calculations", International Journal of Photoenergy, Vol. 2012, Article ID 823498 (6 pages), **2012**. **(第一作者與通訊作者)** (SCI 2015 Impact Factor = 1.226, Ranking: 57 / 90 = 63%)
18	**Hsuan-Chung Wu***, Syuan-Wei Lin, Jhao-Sian Wu, "Effects of Nitrogen Concentration on N-doped Anatase TiO_2: Density Functional Theory and Hubbard U Analysis", Journal of

	Alloys and Compounds, Vol. 522, p. 46–50, **2012**. **(第一作者與通訊作者)** (SCI 2015 Impact Factor = 3.014, Ranking: 4 / 73 = 5%)
19	Moo-Chin Wang, Huey-Jiuan Lin*, Chien-Ho Wang, **Hsuan-Chung Wu**, "Effects of Annealing Temperature on the Photocatalytic Activity of N-doped TiO_2 Thin Films", Ceramics International, Vol. 38, p. 195–200, **2012**. (SCI 2015 Impact Factor = 2.758, Ranking: 3 / 27 = 11%)
20	Yang-Yen Yu* **,** Wen-Chen Chien, Chi-Yi Ciou, **Hsuan-Chung Wu**, "Preparation and Characterization of Regioregular Poly(3-octylthiophene -2,5-diyl)/Copper Indium Disenillide/titania Heterojunction Polymer Solar Cells", Thin Solid Films, Vol. 519, p. 4721–4730, **2011**. (SCI 2015 Impact Factor = 1.761, Ranking: 6 / 18 = 33%)
21	**Hsuan-Chung Wu**, Huey-Jiuan Lin*, "Effects of Actuating Pressure Waveforms on the Droplet Behavior in a Piezoelectric Inkjet", Materials Transactions, Vol. 51, p. 2269–2276, **2010**. **(第一作者)** (SCI 2015 Impact Factor = 0.689, Ranking: 46 / 73 = 63%)