IAS congratulates the NTU faculty who have authored or co-authored the Highly Cited and Hot Papers in Web of Science for 2018 publications as listed below!

Please refer to the Web of Science entry for the definitions of Highly Cited Paper and Hot Paper.

As at 19 Dec 2018

1. Mixed Metal Sulfides for Electrochemical Energy Storage and Conversion
   By: … Lou, XW (Lou, Xiong Wen (David))

   ADVANCED ENERGY MATERIALS
   Volume: 8
   Issue: 3
   Article Number: 1701592
   DOI: 10.1002/aenm.201701592
   Published: JAN 25 2018
   Document Type: Review

   Times Cited: 45
   Highly Cited Paper
   Hot Paper

2. Metal-free efficient photocatalyst for stable visible-light photocatalytic degradation of refractory pollutant
   By: … Wang, H (Wang, Hou)

   APPLIED CATALYSIS B-ENVIRONMENTAL
   Volume: 221
   Pages: 715-725
   DOI: 10.1016/j.apcatb.2017.09.059
   Published: FEB 2018
   Document Type: Article

   Times Cited: 43
   Highly Cited Paper

3. Recent progress on semiconducting polymer nanoparticles for molecular imaging and cancer phototherapy
   By: Li, JC (Li, Jingchao); …; Pu, KY (Pu, Kanyi)
   [1] Nanyang Technol Univ, Sch Chem & Biomed Engn, 70 Nanyang Dr, Singapore 637457, Singapore

   BIOMATERIALS
   Volume: 155
   Times Cited: 42
   Highly Cited Paper
4. Investigation of Multimodal Electret-Based MEMS Energy Harvester With Impact-Induced Nonlinearity
By: …; Wu, J (Wu, Jin)[3]; Ly, SW (Lye, Sun Woh)[3]; …; Miao, JM (Miao, Jianmin)[3]


5. Three-Dimensional Architectures Constructed from Transition-Metal Dichalcogenide Nanomaterials for Electrochemical Energy Storage and Conversion
By: Yun, QB (Yun, Qinbai)[1,2]; Lu, QP (Lu, Qipeng)[1]; Zhang, X (Zhang, Xiao)[1]; Tan, CL (Tan, Chaoliang)[1]; Zhang, H (Zhang, Hua)[1]

[1] Nanyang Technol Univ, Ctr Programmable Mat, Sch Mat Sci & Engn, 50 Nanyang Ave, Singapore 639798, Singapore

6. High-Performance As-Cast Nonfullerene Polymer Solar Cells with Thicker Active Layer and Large Area Exceeding 11% Power Conversion Efficiency
By: …; Wu, B (Wu, Bo)[2]; …; Sum, TC (Sum, Tze Chien)[2]; …

7. Atomically dispersed Ni(i) as the active site for electrochemical CO2 reduction
By: Yang, HB (Yang, Hong Bin)[1,2]; …; Liu, S (Liu, Song)[1]; …; Zhang, LP (Zhang, Liping)[1]; Huang, X (Huang, Xiang)[1]; Wang, HY (Wang, Hsin-Yi)[1]; Cai, WZ (Cai, Weizheng)[1]; Chen, R (Chen, Rong)[1]; Gao, JJ (Gao, Jiajian)[1]; …; Liu, B (Liu, Bin)[1]


By: Lv, HL (Lv, Hualiang)[1,2]; …; Wang, PL (Wang, Paul Luyuan)[2]; …; Xu, ZCJ (Xu, Zhichuan J.)[2]


9. Microbiome Influences Prenatal and Adult Microglia in a Sex-Specific Manner
By: …; Pettersson, S(Pettersson, Sven)[15,16,17]; …

10. Facial Expression Recognition in Video with Multiple Feature Fusion
By: …; Chen, ZH (Chen, Zenghai)[2]; …

11. A library of atomically thin metal chalcogenides
By: Zhou, JD (Zhou, Jiadong)[1]; …; Chen, Y (Chen, Yu)[5]; Xia, J (Xia, Juan)[8]; Wang, H (Wang, Hong)[1]; …; Liu, FC (Liu, Fucai)[1]; Fu, QD (Fu, Qundong)[1]; Zeng, QS (Zeng, Qingsheng)[1]; …; Yu, T (Yu, Ting)[6]; Shen, ZX (Shen, Zexiang)[5]; …; Liu, Z (Liu, Zheng)[1,14,15,16]
[1] Nanyang Technol Univ, Sch Mat Sci & Engn, Ctr Programmable Mat, Singapore, Singapore

12. The influence of the molecular packing on the room temperature phosphorescence of purely organic luminogens
13. High phase-purity 1T'-MoS2- and 1T'-MoSe2- layered crystals
By: Yu, YF (Yu, Yifu)\textsuperscript{[1,2,3]}; Nam, GH (Nam, Gwang-Hyeon)\textsuperscript{[1,4]}; He, QY (He, Qiyuan)\textsuperscript{[1]}; Wu, XJ (Wu, Xue-Jun)\textsuperscript{[1]}; Zhang, K (Zhang, Kang)\textsuperscript{[5]}; ...; Chen, JZ (Chen, Junze)\textsuperscript{[1]}; Ma, QL (Ma, Qinglang)\textsuperscript{[1]}; Zhao, MT (Zhao, Meiting)\textsuperscript{[1]}; Liu, ZQ (Liu, Zhengqing)\textsuperscript{[1]}; ...; Wang, XZ (Wang, Xingzhi)\textsuperscript{[9]}; ...; Xiong, QH (Xiong, Qihua)\textsuperscript{[9]}; Zhang, Q (Zhang, Qing)\textsuperscript{[5]}; Liu, Z (Liu, Zheng)\textsuperscript{[1]}; ...; Zhang, H (Zhang, Hua)\textsuperscript{[1]}

14. Tracking-Error-Based Universal Adaptive Fuzzy Control for Output Tracking of Nonlinear Systems with Completely Unknown Dynamics
By: ...; Er, MJ (Er, Meng Joo)\textsuperscript{[2,3]}

13. **High phase-purity 1T'-MoS2- and 1T'-MoSe2- layered crystals**

By: Yu, YF (Yu, Yifu)\textsuperscript{[1,2,3]}; Nam, GH (Nam, Gwang-Hyeon)\textsuperscript{[1,4]}; He, QY (He, Qiyuan)\textsuperscript{[1]}; Wu, XJ (Wu, Xue-Jun)\textsuperscript{[1]}; Zhang, K (Zhang, Kang)\textsuperscript{[5]}; ...; Chen, JZ (Chen, Junze)\textsuperscript{[1]}; Ma, QL (Ma, Qinglang)\textsuperscript{[1]}; Zhao, MT (Zhao, Meiting)\textsuperscript{[1]}; Liu, ZQ (Liu, Zhengqing)\textsuperscript{[1]}; ...; Wang, XZ (Wang, Xingzhi)\textsuperscript{[9]}; ...; Xiong, QH (Xiong, Qihua)\textsuperscript{[9]}; Zhang, Q (Zhang, Qing)\textsuperscript{[5]}; Liu, Z (Liu, Zheng)\textsuperscript{[1]}; ...; Zhang, H (Zhang, Hua)\textsuperscript{[1]}

14. **Tracking-Error-Based Universal Adaptive Fuzzy Control for Output Tracking of Nonlinear Systems with Completely Unknown Dynamics**

By: ...; Er, MJ (Er, Meng Joo)\textsuperscript{[2,3]}
15. Boosting Bifunctional Oxygen Electrocatalysis with 3D Graphene Aerogel-Supported Ni/MnO Particles
By: Fu, GT (Fu, Gengtao)\textsuperscript{[1,2]}; …; Lee, JM (Lee, Jong-Min)\textsuperscript{[2]}; …
\textsuperscript{[2]} Nanyang Technol Univ, Sch Chem & Biomed Engn, Singapore 637459, Singapore

16. Recent advances in convolutional neural networks
By: Gu, JX (Gu, Jiuxiang)\textsuperscript{[1]}; Wang, ZH (Wang, Zhenhua)\textsuperscript{[2]}; Kuen, J (Kuen, Jason)\textsuperscript{[2]}; Ma, LY (Ma, Lianyang)\textsuperscript{[2]}; Shahroudy, A (Shahroudy, Amir)\textsuperscript{[2]}; Shuai, B (Shuai, Bing)\textsuperscript{[2]}; Liu, T (Liu, Ting)\textsuperscript{[2]}; Wang, XX (Wang, Xingxing)\textsuperscript{[2]}; Wang, G (Wang, Gang)\textsuperscript{[2]}; Cai, JF (Cai, Jianfei)\textsuperscript{[3]}; Chen, T (Chen, Tsuhan)\textsuperscript{[3]}
\textsuperscript{[1]} Nanyang Technol Univ, Interdisciplinary Grad Sch, ROSE Lab, Singapore, Singapore
\textsuperscript{[2]} Nanyang Technol Univ, Sch Elect & Elect Engn, Singapore, Singapore
\textsuperscript{[3]} Nanyang Technol Univ, Sch Comp Sci & Engn, Singapore, Singapore

17. Editable Supercapacitors with Customizable Stretchability Based on Mechanically Strengthened Ultraglon MnO2 Nanowire Composite
By: Lv, ZS (Lv, Zhisheng)\textsuperscript{[1]}; Luo, YF (Luo, Yifei)\textsuperscript{[1,2]}; Tang, YX (Tang, Yuxin)\textsuperscript{[1]}; Wei, JQ (Wei, Jiaqi)\textsuperscript{[1]}; Zhu, ZQ (Zhu, Zhiquan)\textsuperscript{[1]}; Zhou, XR (Zhou, Xinran)\textsuperscript{[1]}; Li, WL (Li, Wenlong)\textsuperscript{[1]}; Zeng, Y (Zeng, Yi)\textsuperscript{[1]}; Zhang, W (Zhang, Wei)\textsuperscript{[1]}; Zhang, YY (Zhang, Yanyan)\textsuperscript{[1]}; Qi, DP (Qi, Dianpeng)\textsuperscript{[1]}; Pan, SW (Pan, Shaowu)\textsuperscript{[1]}; Loh, XJ (Loh, Xian Jun)\textsuperscript{[1,2]}; Chen, XD (Chen, Xiaodong)\textsuperscript{[1]}
\textsuperscript{[1]} Nanyang Technol Univ, Sch Mat Sci & Engn, Innovat Ctr Flexible Devices iFLEX, 50 Nanyang Ave, Singapore 639798, Singapore
By: ...; Er, MJ (Er, Meng Joo) [2,5]

Nanyang Technol Univ, Sch EEE, Singapore 639798, Singapore

IEEE TRANSACTIONS ON FUZZY SYSTEMS
Volume: 26
Issue: 3
Pages: 1613-1625
DOI: 10.1109/TFUZZ.2017.2737405
Published: JUN 2018
Document Type: Article

Times Cited: 27
Highly Cited Paper

19. Enhancing Both Biodegradability and Efficacy of Semiconducting Polymer Nanoparticles for Photoacoustic Imaging and Photothermal Therapy
By: Lyu, Y (Lyu, Yan) [1]; ...; Jiang, YY (Jiang, Yuyan) [1]; Zhen, X (Zhen, Xu) [1]; ...; Pu, KY (Pu, Kanyi) [1]

Nanyang Technol Univ, Sch Chem & Biomed Engn, Singapore 637457, Singapore

ACS NANO
Volume: 12
Issue: 2
Pages: 1801-1810
DOI: 10.1021/acsnano.7b08616
Published: FEB 2018
Document Type: Article

Times Cited: 27
Highly Cited Paper
Hot Paper

By: ...; Chao, DL (Chao, Dongliang) [2]; Wang, HW (Wang, Huanwen) [1,2]; ...; Fan, HJ (Fan, Hong Jin) [1,2]

Nanyang Technol Univ, Sch Phys & Math Sci, Singapore 637371, Singapore

ADVANCED ENERGY MATERIALS
Times Cited: 24
21. Preparation of High-Percentage 1T-Phase Transition Metal Dichalcogenide Nanodots for Electrochemical Hydrogen Evolution
By: Tan, CL (Tan, Chaoliang) [1]; Luo, ZM (Luo, Zhimin) [1]; Chaturvedi, A (Chaturvedi, Apoorva) [1]; ...; Huang, Y (Huang, Ying) [1]; Lai, ZC (Lai, Zhuangchao) [1]; Zhang, X (Zhang, Xiao) [1]; ...; Wang, J (Wang, Jie) [1]; Han, SK (Han, Shikui) [1]; Wu, XJ (Wu, Xue-Jun) [1]; ...; Kloc, C (Kloc, Christian) [1]; Zhang, H (Zhang, Hua) [1]

[ 1 ] Nanyang Technol Univ, Sch Mat Sci & Engn, Ctr Programmable Mat, 50 Nanyang Ave, Singapore 639798, Singapore

22. Rational construction of highly transparent superhydrophobic coatings based on a non-particle, fluorine-free and water-rich system for versatile oil-water separation
By: ...; Chen, Z (Chen, Zhong) [2]; ...


23. Dual-Peak Absorbing Semiconducting Copolymer Nanoparticles for First and Second Near-Infrared Window Photothermal Therapy: A Comparative Study
By: Jiang, YY (Jiang, Yuyan) [1]; Li, JC (Li, Jingchao) [1]; Zhen, X (Zhen, Xu) [1]; Xie, C (Xie, Chen) [1]; Pu, KY (Pu, Kanyi) [1]
24. Construction of hierarchical Ni-Co-P hollow nanobricks with oriented nanosheets for efficient overall water splitting
By: …; Nai, JW (Nai, Jianwei)¹; …; Lou, XW (Lou, Xiong Wen (David))²

25. Online Model Identification and State-of-Charge Estimate for Lithium-Ion Battery With a Recursive Total Least Squares-Based Observer
By: Wei, ZB (Wei, Zhongbao)¹; …; Leng, F (Leng, Feng)¹; Soong, BH (Soong, Boon Hee)³; …

[¹] Nanyang Technol Univ, Sch Chem & Biomed Engn, 62 Nanyang Dr, Singapore 637459, Singapore
[³] Nanyang Technol Univ, Singapore 637141, Singapore
27. Highly efficient photocatalytic activity and mechanism of Yb3+/Tm3+ codoped In2S3 from ultraviolet to near infrared light towards chromium (VI) reduction and rhodamine B oxydative degradation
By: …; Wang, H (Wang, Hou)[1,2,4]

28. Anisotropy and heterogeneity of microstructure and mechanical properties in metal additive manufacturing: A critical review
By: Kok, Y (Kok, Y.); Tan, XP (Tan, X. P.); …; Loh, NH (Loh, N. H.); Liu, E (Liu, E.); Tor, SB (Tor, S. B.).
29. Selective laser melting of lattice structures: A statistical approach to manufacturability and mechanical behavior
By: Sing, SL (Sing, Swee Leong)[1,2]; Wiria, FE (Wiria, Florencia Edith)[1,3]; Yeong, WY (Yeong, Wai Yee)[1,2]

[1] Nanyang Technol Univ, SIMTech NTU Joint Lab Addit Mfg 3D, HW3-01-01,65A Nanyang Dr, Singapore 637333, Singapore

30. Rationally designed hierarchical N-doped carbon@NiCo2O4 double-shelled nanoboxes for enhanced visible light CO2 reduction
By: Wang, SB (Wang, Sibo)[1]; Guan, BY (Guan, Bu Yuan)[1]; Lou, XW (Lou, Xiong Wen (David))[1]


31. Hierarchical Hollow Nanoprisms Based on Ultrathin Ni-Fe Layered Double Hydroxide Nanosheets with Enhanced Electrocatalytic Activity towards Oxygen Evolution
By: Yu, L (Yu, Le)[1]; Yang, JF (Yang, Jing Fan)[1]; Guan, BY (Guan, Bu Yuan)[1]; Lu, Y (Lu, Yan)[1]; Lou, XW (Lou, Xiong Wen (David))[1]

32. Molybdenum oxide nanosheets meet ascorbic acid: Tunable surface plasmon resonance and visual colorimetric detection at room temperature
By: ...; An, HJ (An, Hongjie)[2]; ...


33. Topological insulator laser: Theory
By: ...; Chong, YD (Chong, Y. D.)[5]; ...


34. Topologically protected refraction of robust kink states in valley photonic crystals
By: Gao, F (Gao, Fei)[1]; Xue, HR (Xue, Haoran)[1]; Yang, ZJ (Yang, Zhaoju)[1]; ...; Lin, X (Lin, Xiao)[1]; Chong, YD (Chong, Yidong)[1,4]; ...; Zhang, BL (Zhang, Baile)[1,4]

35. Construction of Complex Co₃O₄@Co₃V₂O₈ Hollow Structures from Metal-Organic Frameworks with Enhanced Lithium Storage Properties
By: Lu, Y (Lu, Yan)¹, Yu, L (Yu, Le)¹, …, Lou, XW (Lou, Xiong Wen (David))¹

[¹] Nanyang Technol Univ, Sch Chem & Biomed Engn, 62 Nanyang Dr, Singapore 637459, Singapore

36. Construction of ZnIn₂S₄-In₂O₃ Hierarchical Tubular Heterostructures for Efficient CO₂ Photoreduction
By: Wang, SB (Wang, Sibo)¹, Guan, BY (Guan, Bu Yuan)¹, Lou, XWD (Lou, Xiong Wen David)¹

[¹] Nanyang Technol Univ, Sch Chem & Biomed Engn, 62 Nanyang Dr, Singapore 637459, Singapore

37. Nanomaterials and technologies for low temperature solid oxide fuel cells: Recent advances, challenges and opportunities
By: Fan, LD (Fan, Liangdong)¹,³,⁴; …, Su, PC (Su, Pei-Chen)⁴; …
38. Rational design of materials interface at nanoscale towards intelligent oil-water separation  
By: …; Tang, YX (Tang, Yuxin); Zhou, XR (Zhou, Xinran); …; Chen, Z (Chen, Zhong); …

39. Learning a No-Reference Quality Assessment Model of Enhanced Images With Big Data  
By: …; Lin, WS (Lin, Weisi)

40. Space micropropulsion systems for Cubesats and small satellites: From proximate targets to furthermost frontiers  
By: Levchenko, I (Levchenko, Igor); … Xu, SY (Xu, Shuyan)
41. Epitaxial growth of hybrid nanostructures
   By: Tan, CL (Tan, Chaoliang)¹; Chen, JZ (Chen, Junze)¹; Wu, XJ (Wu, Xue-Jun)¹; Zhang, H (Zhang, Hua)¹

   [¹ Nanyang Technol Univ, Sch Mat Sci & Engn, Ctr Programmable Mat, 50 Nanyang Ave, Singapore 639798, Singapore]

42. The 2016 Kaikoura earthquake: Simultaneous rupture of the subduction interface and overlying faults
   By: Wang, T (Wang, Teng)¹; Wei, SJ (Wei, Shengji)¹,²; Shi, XH (Shi, Xuhua)¹; Li, LL (Li, Linlin)¹; Peng, DJ (Peng, Dongjiu)¹; Weldon, RJ (Weldon, Ray J.)¹,⁴; Barbot, S (Barbot, Sylvain)¹,²

   [¹ Nanyang Technol Univ, Earth Observ Singapore, Singapore, Singapore
   [² Nanyang Technol Univ, Asian Sch Environment, Singapore, Singapore]
Adaptive Approximation-Based Regulation Control for a Class of Uncertain Nonlinear Systems Without Feedback Linearizability
By: Er, MJ (Er, Meng Joo)\textsuperscript{1,2,8}

\[ 5 \] Nanyang Technol Univ, Sch Elect & Elect Engn, Singapore 639798, Singapore

<table>
<thead>
<tr>
<th>IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume:</strong> 29</td>
</tr>
<tr>
<td><strong>Issue:</strong> 8</td>
</tr>
<tr>
<td><strong>Pages:</strong> 3747-3760</td>
</tr>
<tr>
<td><strong>DOI:</strong> 10.1109/TNNLS.2017.2738918</td>
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<td><strong>Published:</strong> AUG 2018</td>
</tr>
<tr>
<td><strong>Document Type:</strong> Article</td>
</tr>
</tbody>
</table>

[44.]

A Metalens with a Near-Unity Numerical Aperture
By: Khaidarov, E (Khaidarov, Egor)\textsuperscript{1,2}; ...

\[ 2 \] Nanyang Technol Univ, Photon Inst, Sch Elect & Elect Engn, LUMINOUS Ctr Excellence Semicond Lighting & Disp, 50 Nanyang Ave, Singapore 639798, Singapore

<table>
<thead>
<tr>
<th>NANO LETTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume:</strong> 18</td>
</tr>
<tr>
<td><strong>Issue:</strong> 3</td>
</tr>
<tr>
<td><strong>Pages:</strong> 2124-2132</td>
</tr>
<tr>
<td><strong>DOI:</strong> 10.1021/acs.nanolett.8b00368</td>
</tr>
<tr>
<td><strong>Published:</strong> MAR 2018</td>
</tr>
<tr>
<td><strong>Document Type:</strong> Article</td>
</tr>
</tbody>
</table>

[45.]

A Scalable Strategy To Develop Advanced Anode for Sodium-Ion Batteries: Commercial Fe3O4-Derived Fe3O4@FeS with Superior Full-Cell Performance
By: Zhang, Y (Zhang, Yu)\textsuperscript{2}; ...

\[ 2 \] Nanyang Technol Univ, Sch Mat Sci & Engn, 50 Nanyang Ave, Singapore 639798, Singapore

<table>
<thead>
<tr>
<th>ACS APPLIED MATERIALS &amp; INTERFACES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume:</strong> 10</td>
</tr>
<tr>
<td><strong>Issue:</strong> 4</td>
</tr>
<tr>
<td><strong>Pages:</strong> 3581-3589</td>
</tr>
<tr>
<td><strong>DOI:</strong> 10.1021/acsami.7b16580</td>
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<tr>
<td><strong>Published:</strong> JAN 31 2018</td>
</tr>
<tr>
<td><strong>Document Type:</strong> Article</td>
</tr>
</tbody>
</table>

Times Cited: 17
Highly Cited Paper
46. Temperature-Correlated Afterglow of a Semiconducting Polymer Nanococktail for Imaging-Guided Photothermal Therapy
By: Zhen, X (Zhen, Xu)\textsuperscript{1}; Xie, C (Xie, Chen)\textsuperscript{1}; Pu, KY (Pu, Kanyi)\textsuperscript{1}


ANGEWANDTE CHEMIE-INTERNATIONAL EDITION
Volume: 57
Issue: 15
Pages: 3938-3942
DOI: 10.1002/anie.201712550
Published: APR 3 2018
Document Type:Article

Times Cited: 16
Highly Cited Paper

47. Recent progress and perspectives of space electric propulsion systems based on smart nanomaterials
By: Levchenko, I (Levchenko, I.)\textsuperscript{1,2}; Xu, S (Xu, S.); ...

[1] Nanyang Technol Univ, Natl Inst Educ, Plasma Sources & Applicat Ctr, 1 Nanyang Walk, Singapore 637616, Singapore

NATURE COMMUNICATIONS
Volume: 9
Article Number: 879
DOI: 10.1038/s41467-017-02269-7
Published: FEB 28 2018
Document Type:Review

Times Cited: 16
Highly Cited Paper

48. Enhanced photocatalytic degradation of bisphenol A with Ag-decorated S-doped g-C3N4 under solar irradiation: Performance and mechanistic studies
By: Oh, WD (Oh, Wen-Da)\textsuperscript{1}; Lok, LW (Lok, Li-Wen)\textsuperscript{2}; Veksha, A (Veksha, Andrei)\textsuperscript{1}; Giannis, A (Giannis, Apostolos)\textsuperscript{1}; Lim, TT (Lim, Teik-Thu)\textsuperscript{1,2}

[2] Nanyang Technol Univ, Sch Civil & Environm Engn, 50 Nanyang Ave, Singapore 639798, Singapore

CHEMICAL ENGINEERING JOURNAL
Volume: 333
Pages: 739-749
DOI: 10.1016/j.cej.2017.09.182
Published: FEB 1 2018
Document Type:Article

Times Cited: 16
Highly Cited Paper
By: Zhang, P (Zhang, Peng)\(^1\); Guan, BY (Guan, Bu Yuan)\(^1\); Yu, L (Yu, Le)\(^1\); Lou, XW (Lou, Xiong Wen (David))\(^1\)


**CHEM**
**Volume:** 4
**Issue:** 1
**Pages:** 162-173
**DOI:** 10.1016/j.chempr.2017.10.018
**Published:** JAN 11 2018

**Document Type:** Article

**Times Cited:** 16
**Highly Cited Paper**

50. An Efficient and Earth-Abundant Oxygen-Evolving Electrocatalyst Based on Amorphous Metal Borides
By: Nsanzimana, JMV (Nsanzimana, Jean Marie Vianney)\(^1\); Peng, YC (Peng, Yuecheng)\(^1\); ... Thia, L (Thia, Larissa)\(^1\); ... Wang, X (Wang, Xin)\(^1\)


**ADVANCED ENERGY MATERIALS**
**Volume:** 8
**Issue:** 1
**Article Number:** 1701475
**DOI:** 10.1002/aenm.201701475
**Published:** JAN 5 2018

**Document Type:** Article

**Times Cited:** 16
**Highly Cited Paper**

By: Liu, JL (Liu, Jilei)\(^1\); Wang, J (Wang, Jin)\(^1\); ... Lin, JY (Lin, Jianyi)\(^5\); Shen, ZX (Shen, Ze Xiang)\(^1\)


**ADVANCED SCIENCE**
**Volume:** 5

**Times Cited:** 16
**Highly Cited Paper**
52. A comprehensive review on food waste anaerobic digestion: Research updates and tendencies
By: … Liu, Y (Liu, Yu)\[3\]


53. Objective Reduction in Many-Objective Optimization: Evolutionary Multiobjective Approaches and Comprehensive Analysis
By: Yuan, Y (Yuan, Yuan)\[1\]; Ong, YS (Ong, Yew-Soon)\[1\]; Gupta, A (Gupta, Abhishek)\[1\]; …

[1] Nanyang Technol Univ, Sch Comp Sci & Engn, Singapore 639798, Singapore

By: Guan, BY (Guan, Bu Yuan)\[1\]; Lu, Y (Lu, Yan)\[1\]; … Lou, XW (Lou, Xiong Wen (David))\[1\]

55. **Recent Advances in Radical-Initiated C(sp(3))-H Bond Oxidative Functionalization of Alkyl Nitriles**

By: ... [Loh, TP (Loh, Teck-Peng)]


**ACS CATALYSIS**

Volume: 8
Issue: 1
Pages: 258-271
DOI: 10.1021/acscatal.7b03334
Published: JAN 2018
Document Type: Review

Times Cited: 15
Highly Cited Paper

56. **Review on building energy performance improvement using phase change materials**

By: [Song, MJ (Song Mengjie)]


**ENERGY AND BUILDINGS**

Volume: 158
Issue: 1
Pages: 776-793
DOI: 10.1016/j.enbuild.2017.10.066
Published: JAN 1 2018
Document Type: Review

Times Cited: 15
Highly Cited Paper

57. **Oxygenic Hybrid Semiconducting Nanoparticles for Enhanced Photodynamic Therapy**

By: [Zhu, HJ (Zhu, Houjuan); Li, JC (Li, Jingchao); ... Chen, P (Chen, Peng); Pu, KY (Pu, Kanyi)]


**NANO LETTERS**

Volume: 18
Issue: 1

Times Cited: 15
Highly Cited Paper
58. Electrochemical Estimation and Control for Lithium-Ion Battery Health-Aware Fast Charging
By: ... Wei, ZB (Wei, Zhongbao)[3]; ...


IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS
Volume: 65
Issue: 8
Pages: 6635-6645
DOI: 10.1109/TIE.2017.2772154
Published: AUG 2018
Document Type: Article

Times Cited: 14
Highly Cited Paper

59. Ultrathin Porous NiFeV Ternary Layer Hydroxide Nanosheets as a Highly Efficient Bifunctional Electrocatalyst for Overall Water Splitting
By: Dinh, KN (Khang Ngoc Dinh)[1,2]; Zheng, PL (Zheng, Penglun)[2]; Dai, ZF (Dai, Zhengfei)[1,2]; Zhang, Y (Zhang, Yu)[2]; Dangol, R (Dangol, Raksha)[2]; Zheng, Y (Zheng, Yun)[2]; ... Yan, QY (Yan, Qingyu)[1,2]


SMALL
Volume: 14
Issue: 8
Article Number: UNSP 1703257
DOI: 10.1002/smll.201703257
Published: FEB 22 2018
Document Type: Article

Times Cited: 14
Highly Cited Paper

60. A survey on applications of semi-tensor product method in engineering
By: ... Meng, M (Meng, Min)[2]; ...

61. Fresh and hardened properties of 3D printable cementitious materials for building and construction
By: Paul, SC (Paul, Suvash Chandra); Tay, YWD (Tay, Yi Wei Daniel); Panda, B (Panda, Biranchi); Tan, MJ (Tan, Ming Jen)


62. Computational intelligence in optical remote sensing image processing
By: Ong, YS (Ong, Yew Soon)


63. An application of evolutionary system identification algorithm in modelling of energy production system
By: Tai, K (Tai, Kang)

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Authors</th>
<th>Journal</th>
<th>Times Cited</th>
<th>Highly Cited Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>64</td>
<td>Measurement of tensile bond strength of 3D printed geopolymer mortar</td>
<td>Panda, B; Paul, SC; Mohamed, N; Tay, YWD; Tan, MJ</td>
<td>MEASUREMENT</td>
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<td></td>
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<tr>
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<td>Micro Fourier Transform Profilometry (mu FTP): 3D shape measurement</td>
<td>Asundi, A</td>
<td>OPTICS AND LASERS IN ENGINEERING</td>
<td>12</td>
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<td>Fabrication of 3D mesoporous networks of assembled CoO nanoparticles</td>
<td>Miao, JW; Liu, B</td>
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<td>for efficient photocatalytic reduction of aqueous Cr(VI)</td>
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<td>Pages: 635-644</td>
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67. Efficient and Privacy-Preserving Outsourced Calculation of Rational Numbers
By: ... Lu, RX (Lu, Rongxing)[4]; ...


| IEEE TRANSACTIONS ON DEPENDABLE AND SECURE COMPUTING |
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68. Numerical investigations on an improved counterflow double-channel micro combustor fueled with hydrogen for enhancing thermal performance
By: ... Lin, RM (Lin, Rongming)[3]


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69. Optical Anapole Metamaterial
By: ... Liu, AQ (Liu, Ai-Qun)[5]; Zheludev, NI (Zheludev, Nikolay I.)[3,4,6,7]; ...


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70. Near-Infrared Fluorescent Molecular Probe for Sensitive Imaging of Keloid  
By: Miao, QQ (Miao, Qingqing)\(^1\); Yeo, DC (Yeo, David C.)\(^1\); Wiraja, C (Wiraja, Christian)\(^1\); Zhang, JJ (Zhang, Jianjian)\(^1\); Ning, XY (Ning, Xiaoyu)\(^1\); Xu, CJ (Xu, Chenjie)\(^1\); Pu, KY (Pu, Kanyi)\(^1\)  

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<td>Issue: 5</td>
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<td>Pages: 1256-1260</td>
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71. Ytterbium-Catalyzed Hydroboration of Aldehydes and Ketones  
By: … Pullarkat, SA (Pullarkat, Sumod A.)\(^3\); …  


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<td>Volume: 83</td>
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<td>Issue: 1</td>
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72. Spectrum Inference in Cognitive Radio Networks: Algorithms and Applications  
By: … Jiao, YT (Jiao, Yutao)\(^3\); …  

[\(^3\) Nanyang Technol Univ, Sch Comp Sci & Engn, Singapore 639798, Singapore]

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73. Self-Contained Polymer/Metal 3D Printed Electrochemical Platform for Tailored Water Splitting
By: Ambrosi, A (Ambrosi, Adriano); Pumera, M (Pumera, Martin)


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Volume: 28
Issue: 27
Special Issue: SI
Article Number: 1700655
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74. Spectrum blind reconstruction and direction of arrival estimation of multi-band signals at sub-Nyquist sampling rates
By: Razul, SG (Razul, Sirajudeen Gulam); See, CMS (See, Chong-Meng Samson)


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Volume: 29
Issue: 2
Pages: 643-669
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75. Bayesian network based extreme learning machine for subjectivity detection
By: Chaturvedi, I (Chaturvedi, Iti); Cambria, E (Cambria, Erik)

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76. Lipopolysaccharides detection on a grating-coupled surface plasmon resonance smartphone biosensor
By: Zhang, JL (Zhang, Jinling); Liu, XH (Liu, Xiaohu); Liedberg, B (Liedberg, Bo)


77. Confined transverse electric phonon polaritons in hexagonal boron nitrides
By: Lin, X (Lin, Xiao); Zhang, BL (Zhang, Baile)


78. Natural language based financial forecasting: a survey
By: Xing, FZ (Xing, Frank Z.); Cambria, E (Cambria, Erik)
79. Unraveling the cooperative synergy of zero-dimensional graphene quantum dots and metal nanocrystals enabled by layer-by-layer assembly
By: Zeng, ZP (Zeng, Zhiping)¹²; Xiao, FX (Xiao, Fang-Xing)¹¹²; … Chen, SF (Chen, Shufen)¹²; Yu, ZZ (Yu, Zhongzheng)¹²; Wang, R(Wang, Rong)⁴⁴; … Tan, TTY (Tan, Timothy Thatt Yang)¹²

80. Steroidogenic abnormalities in translocator protein knockout mice and significance in the aging male
By: Barron, AM (Barron, Anna M.)¹²; …
### Hybrid Optimization for Economic Deployment of ESS in PV-Integrated EV Charging Stations

By: Chaudhari, K (Chaudhari, Kalpesh)\(^1\); Ukil, A (Ukil, Abhisek)\(^1\); Kumar, KN (Kumar, K. Nandha)\(^1\); Manandhar, U (Manandhar, Ujjal)\(^1\); Kollimalla, SK (Kollimalla, Sathish Kumar)\(^1\)

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<td>Issue: 1</td>
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### Model-Based Referenceless Quality Metric of 3D Synthesized Images Using Local Image Description

By: Lin, WS (Lin, Weisi)\(^3\); Thalmann, D (Thalmann, Daniel)\(^4\)


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### Effect of Cation Composition on the Mechanical Stability of Perovskite Solar Cells

By: Haur, LJ (Haur, Lew Jia)\(^4\); Priyadarshi, A (Priyadarshi, Anish)\(^4\); Mathews, N (Mathews, Nripan)\(^4,5\); ...


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