

Udo Bach Group - Publications – Since 2010

#	<i>Reference</i>	IF	Citations
36	Kashif, M. K.; Nippe M., Duffy, N. W.; Forsyth, C. M.; Chang, C. J.; Long, J. R.; Spiccia, L.; Bach, U. Stable Dye-Sensitized Solar Cell Electrolytes Based on Cobalt(II)/(III) Complexes of a Hexadentate Pyridyl Ligand <i>Angewandte Chemie</i> 2013 , (published online, Hot Article)	13.455	-
35	Chiang Y. F., Chen R. T., Burke A., ; Bach, U. , Chen P., Guo T. F. Non-color distortion for visible light transmitted tandem solid state dye-sensitized solar cells <i>Renewable Energy</i> 2013 , accepted (published online)	2.978	-
34	Singh A., Chang S. L. Y., Hocking R. K., Bach, U. ; Spiccia, L. Anodic Deposition of NiO _x Water Oxidation Catalysts from Macrocyclic Nickel(II) Complexes <i>Catalysis Science & Technology</i> 2013 , (published online)	-	-
33	Xiang W.C., Gupta A., Kashif M. K., Duffy N., Bilic A., Evans R. A., Spiccia L., Bach U. Cyanomethylbenzoic Acid: An Acceptor for Donor- π -Acceptor Chromophores Used in Dye-Sensitized Solar Cells <i>ChemSusChem</i> 2013 , 6 (2) 256-260	6,827	-
32	Singh A. Chang S. L. Y., Hocking R. K., Bach, U. ; Spiccia, L. Highly active nickel oxide water oxidation catalysts deposited from molecular complexes <i>Energy & Environmental Science</i> 2013 , 6 (2) 579-586	9.610	-
31	Fu D. Lay P., Bach U. , TCO-free monolithic back-contact dye-sensitized solar cells <i>Energy & Environmental Science</i> 2013 , 6(3) 824-829	9.610	-
30	Powar S., Daeneke T., Ma M. T., Fu D. C., Duffy N. W., Goetz G., Weidener M., Mishra A., Baeuerle P., Spiccia L., Bach U. Highly Efficient p-Type Dye-sensitized Solar Cells based on Tris(1,2-diaminoethane)Cobalt(II)/(III) Electrolytes <i>Angewandte Chemie</i> 2013 , 52 (2) 602-605 (Hot Article)	13.455	-
29	Anstaett F., Zheng Y., Thai T., Funston A. M., Bach U. , Gasser G. Synthesis of Stable Peptide Nucleic Acid-Modified Gold Nanoparticles and their Assembly onto Gold Surfaces <i>Angewandte Chemie</i> 2013 , 52 (15) 4217-4220	13.455	-

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28	Xiang, W.; Huang, F.; Cheng, Y.-B.; Bach, U. ; Spiccia, L., Aqueous dye-sensitized solar cell electrolytes based on the cobalt(II)/(III) tris(bipyridine) redox couple. <i>Energy & Environmental Science</i> 2013 , 6 (1), 121-127.	9.610	-
27	Zheng Y., Thai T., Reineck P., Qui L., Guo Y., U. Bach DNA-Directed Self-Assembly of Core-Satellite Plasmonic Nanostructures: A Highly Sensitive and Reproducible Near-IR SERS Sensor <i>Advanced Functional Materials</i> 2013 , 23, 1519-1526	10.179	-
26	Kashif, M. K.; Axelson, J. C.; Duffy, N. W.; Forsyth, C. M.; Chang, C. J.; Long, J. R.; Spiccia, L.; Bach, U. , A New Direction in Dye-Sensitized Solar Cells Redox Mediator Development: In Situ Fine-Tuning of the Cobalt(II)/(III) Redox Potential through Lewis Base Interactions. <i>Journal of the American Chemical Society</i> 2012 , 134 (40), 16646-16653.	9.907	1
25	Bach, U. ; Daeneke, T., A Solid Advancement for Dye-Sensitized Solar Cells. <i>Angewandte Chemie-International Edition</i> 2012 , 51 (42), 10451-10452.	13.455	-
24	Reineck, P.; Lee, G. P.; Brick, D.; Karg, M.; Mulvaney, P.; Bach, U. , A Solid-State Plasmonic Solar Cell via Metal Nanoparticle Self-Assembly. <i>Advanced Materials</i> 2012 , 24 (35), 4750-4755.	13.877	3
23	Gupta, A.; Ali, A.; Bilic, A.; Gao, M.; Hegedus, K.; Singh, B.; Watkins, S. E.; Wilson, G. J.; Bach, U. ; Evans, R. A., Absorption enhancement of oligothiophene dyes through the use of a cyanopyridone acceptor group in solution-processed organic solar cells. <i>Chemical Communications</i> 2012 , 48 (13), 1889-1891.	6.169	3
22	Daeneke, T.; Uemura, Y.; Duffy, N. W.; Mozer, A. J.; Koumura, N.; Bach, U. ; Spiccia, L., Aqueous Dye-Sensitized Solar Cell Electrolytes Based on the Ferricyanide-Ferrocyanide Redox Couple. <i>Advanced Materials</i> 2012 , 24 (9), 1222-1225.	13.877	6
21	Zhang, X. L.; Zhang, Z.; Huang, F.; Baeuerle, P.; Bach, U. ; Cheng, Y.-B., Charge transport in photocathodes based on the sensitization of NiO nanorods. <i>Journal of Materials Chemistry</i> 2012 , 22 (14), 7005-7009.	5.968	3

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20	Daeneke, T.; Mozer, A. J.; Kwon, T.-H.; Duffy, N. W.; Holmes, A. B.; Bach, U. ; Spiccia, L., Dye regeneration and charge recombination in dye-sensitized solar cells with ferrocene derivatives as redox mediators. <i>Energy & Environmental Science</i> 2012 , 5 (5), 7090-7099.	9.610	8
19	Daeneke, T.; Mozer, A. J.; Uemura, Y.; Makuta, S.; Fekete, M.; Tachibana, Y.; Koumura, N.; Bach, U. ; Spiccia, L., Dye Regeneration Kinetics in Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> 2012 , 134 (41), 16925-16928.	9.907	-
18	Powar, S.; Wu, Q.; Weideler, M.; Nattestad, A.; Hu, Z.; Mishra, A.; Baeuerle, P.; Spiccia, L.; Cheng, Y.-B.; Bach, U. , Improved photocurrents for p-type dye-sensitized solar cells using nano-structured nickel(II) oxide microballs. <i>Energy & Environmental Science</i> 2012 , 5 (10), 8896-8900.	9.610	2
17	Gupta, A.; Ali, A.; Singh, T. B.; Bilic, A.; Bach, U. ; Evans, R. A., Molecular engineering for panchromatic absorbing oligothiophene donor-pi-acceptor organic semiconductors. <i>Tetrahedron</i> 2012 , 68 (46), 9440-9447.	3.025	-
16	Cappel, U. B.; Daeneke, T.; Bach, U. , Oxygen-Induced Doping of Spiro-MeOTAD in Solid-State Dye-Sensitized Solar Cells and Its Impact on Device Performance. <i>Nano Letters</i> 2012 , 12 (9), 4925-4931.	13.198	2
15	Fu, D.; Huang, P.; Bach, U. , Platinum coated counter electrodes for dye-sensitized solar cells fabricated by pulsed electrodeposition-Correlation of nanostructure, catalytic activity and optical properties. <i>Electrochimica Acta</i> 2012 , 77, 121-127	3.832	1
14	Thai, T.; Zheng, Y.; Ng, S. H.; Mudie, S.; Altissimo, M.; Bach, U. , Self-Assembly of Vertically Aligned Gold Nanorod Arrays on Patterned Substrates. <i>Angewandte Chemie-International Edition</i> 2012 , 51 (35), 8732-8735.	13.455	-
13	Zhang, X. L.; Zhang, Z.; Chen, D.; Baeuerle, P.; Bach, U. ; Cheng, Y.-B., Sensitization of nickel oxide: improved carrier lifetime and charge collection by tuning nanoscale crystallinity. <i>Chemical Communications</i> 2012 , 48 (79), 9885-9887.	6.169	-

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11	Weidelener, M.; Mishra, A.; Nattestad, A.; Powar, S.; Mozer, A. J.; Mena-Osteritz, E.; Cheng, Y.-B.; Bach, U. ; Baeuerle, P., Synthesis and characterization of perylene-bithiophene-triphenylamine triads: studies on the effect of alkyl-substitution in p-type NiO based photocathodes. <i>Journal of Materials Chemistry</i> 2012 , 22 (15), 7366-7379.	5.968	2
10	Kwon, T.-H.; Armel, V.; Nattestad, A.; MacFarlane, D. R.; Bach, U. ; Lind, S. J.; Gordon, K. C.; Tang, W.; Jones, D. J.; Holmes, A. B., Dithienothiophene (DTT)-Based Dyes for Dye-Sensitized Solar Cells: Synthesis of 2,6-Dibromo-DTT. <i>Journal of Organic Chemistry</i> 2011 , 76 (10), 4088-4093.	4.450	14
9	Zhang, X. L.; Huang, F.; Nattestad, A.; Wang, K.; Fu, D.; Mishra, A.; Baeuerle, P.; Bach, U. ; Cheng, Y.-B., Enhanced open-circuit voltage of p-type DSC with highly crystalline NiO nanoparticles. <i>Chemical Communications</i> 2011 , 47 (16), 4808-4810.	6.169	18
8	Zheng, Y.; Lalander, C. H.; Thai, T.; Dhuey, S.; Cabrini, S.; Bach, U. , Gutenberg-Style Printing of Self-Assembled Nanoparticle Arrays: Electrostatic Nanoparticle Immobilization and DNA-Mediated Transfer. <i>Angewandte Chemie-International Edition</i> 2011 , 50 (19), 4398-4402.	13.455	2
7	Daeneke, T.; Kwon, T.-H.; Holmes, A. B.; Duffy, N. W.; Bach, U. ; Spiccia, L., High-efficiency dye-sensitized solar cells with ferrocene-based electrolytes. <i>Nature Chemistry</i> 2011 , 3 (3), 211-215.	20.524	93
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4	Fu, D. C.; Zhang, X. L.; Barber, R. L.; Bach, U. , Dye-Sensitized Back-Contact Solar Cells. <i>Advanced Materials</i> 2010 , <i>22</i> (38), 4270-+.	13.877	6
3	Nattestad, A.; Mozer, A. J.; Fischer, M. K. R.; Cheng, Y. B.; Mishra, A.; Bauerle, P.; Bach, U. , Highly efficient photocathodes for dye-sensitized tandem solar cells. <i>Nature Materials</i> 2010 , <i>9</i> (1), 31-35.	32.841	96
2	Zheng, Y. H.; Lalander, C. H.; Bach, U. , Nanoscale force induced size-selective separation and self-assembly of metal nanoparticles: sharp colloidal stability thresholds and hcp ordering. <i>Chemical Communications</i> 2010 , <i>46</i> (42), 7963-7965.	6.169	4
1	Thompson, S. J.; Duffy, N. W.; Bach, U. ; Cheng, Y. B., On the Role of the Spacer Layer in Monolithic Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> 2010 , <i>114</i> (5), 2365-2369.	4.805	5