IRG1

a. Primary MRSEC Support that Acknowledge the MRSEC Award


**b. Partial MRSEC Support that Acknowledge the MRSEC Award**


**c. Publications Resulting from IRG Research, but do not Acknowledge the MRSEC Award**

None
**a. Primary MRSEC Support that Acknowledge the MRSEC Award**


**b. Partial MRSEC Support that Acknowledge the MRSEC Award**


c. **Publications Resulting from IRG Research, but do not Acknowledge the MRSEC Award**

None

**IRG3**

a. **Primary MRSEC Support that Acknowledge the MRSEC Award**


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c. Publications Resulting from IRG Research, but do not Acknowledge the MRSEC Award

None

SEEDS/INITIATIVES

a. Primary MRSEC Support that Acknowledge the MRSEC Award

None

b. Partial MRSEC Support that Acknowledge the MRSEC Award

None

c. Publications Resulting from IRG Research, but do not Acknowledge the MRSEC Award

None

SHARED FACILITIES


N.C. George, A. Birkel, J. Brgoch, B.-C. Hong, A. Mikhailovsky, K. Page, A. Llobet, R. Seshadri, “Average and local structural origins of the optical properties of the nitride phosphor La$_{3-x}$Ce$_x$Si$_{6}$N$_{11}$(0$<x$< 3),” *Inorg. Chem.* **52**, 13730-13741 (2013)


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a. Patents granted during the current period

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B.F. Chmelka, G. Athens, A.-H. Lu
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“Oxyfluoride phosphor”
S.P. DenBaars, W.-B. Im, R. Seshadri
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“Semiconducting nano materials”
D.E. Morse, B. Schwenzer, J.R. Gomm, K.M. Roth, B. Heiken, R. Brutchey
U.S. Patent 8,568,686 (10/29/13)

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J.H. Sherman, E.W. McFarland, M.J. Weiss, I.M. Lorkovic, L.E. Laverman, S. Sun,
D.J. Schaefer, G.D. Stucky, P.C. Ford, P. Grosso, A.W. Breed, M.F. Doherty
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“Mesocellular oxide foams as hemostatic compositions and methods of use”
G. Stucky, S. Baker, A. Sawvel
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b. Patent applications (excluding provisional applications) during the current period

“Regiochemical constructions for the synthesis of thiadiazolo(3,4-c)pyridine containing narrow band-gap conjugated polymers”
G. Bazan, P.S. Hsu, G.C. Welch, Q. Wen, L. Ying
Applic. filed 11/22/13
Applic. # 14/087,702

“Conjugated polymers with chiral side chain for organic thin film transistors”
G. Bazan, T.-Q. Nguyen, L. Ying, P. Zalar
Applic. filed 4/24/13
Applic. # 13/869,533

“Additive processing for single-component solution processed organic field-effect transistors”
G. Bazan, T.-Q. Nguyen, L. Ying, P. Zalar, Y. Zhang
Applic. filed 4/24/13
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“A single phase and full color phosphor”
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“A modular strategy for introducing end-functional segments into conjugated copolymers”
M. Chabinyc, C.J. Hawker, S.Y. Ku, M. Robb
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“Benzodipyrrolidones and their polymers: Synthesis and applications for organic solar cells”
W. Cui, F. Wudl
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B.P. Fors, C.J. Hawker
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“Hydrolytically degradable poly(ethylene glycol) derivatives through incorporation of methylene ethylene oxide units”
C.J. Hawker, A. Lee, P. Lundberg, N.A. Lynd, E. Pressly, S.A. van den Berg
Applic. filed 3/15/13
Applic. # PCT/US2013/031882

**c. Patents licensed during the current period**

“Methods and compositions for detection and analysis of polynucleotides using light harvesting multichromophores”
G. Bazan, B.S. Gaylord, S. Wang
Application filed 11/21/13
Application # 14/086,532
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G. Bazan, C.V. Hoven, T.-Q. Nguyen, G.C.Welch
Applic. filed 10/11/13
Applic. # 13/988,756
Licensed.

“Spatial and temporal control of brush formation on surfaces”
B.P. Fors, C.J. Hawker, J. Poelma
Applic. filed 10/9/13
Applic. # 14/050,098
Licensed.