H. Daniel Young

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Experience

09/09-Present	Associate Professor	Wright State University, ME/MAT Engineering
09/03-09/09	Assistant Professor	Wright State University, ME/MAT Engineering
2000-2003	Postdoctoral Associate	National Research Council Fellowship
2000	Research Faculty	University of Maryland, College Park
1994-1999	Graduate Research Assistant	University of Maryland, College Park

Education

1999	Ph.D. in Materials Science and Engineering Advisor: Professor Aris Christou	University of Maryland, College Park
1997	M.S. in Materials Science and Engineering	University of Maryland, College Park
1993	B.S. in Engineering Physics	University of Illinois, Urbana-Champaign

Honors

Wright State University College of Engineering and Computer Science Service Award, 2022
ORISE Summer Faculty Fellow, 2021
National Research Council Postdoctoral Fellow, 2000-2002
Center for Optoelectronic Devices, Interconnects, and Packaging Graduate Fellowship, 1998-1999

Recent Teaching at Wright State

EGR 8919	Ph.D. Seminar
EGR 3940	Engineering Internship
ME 4910/4920	Senior Capstone Design I and II
ME 4880/6880	Powder Processing of Materials
ME 4770/6770	Mechanical Metallurgy
ME 4740/6740	Materials Selection and Failure Analysis
ME 4620	Mechanical Testing Lab
ME 3760/5760	Kinetics and Diffusion
ME 3750/5750	Thermodynamics of Materials
ME 3120	Mechanics of Materials7
ME 2700	Introduction to Structure and Properties of Materials
ME 2600	Introduction to Metallography
ME 2120	Statics
ME 2020	Mechanical Drawing, Solid Modeling and Design
ME 1040	Engineering Design and Solid Modeling

Postdoctoral researchers supervised

Mostafa El-Ashry, 12/04-1/06, Current position: Director, Center for Design and Prototyping at Zewail City of Science and Technology, Egypt.

Ph.D. students supervised

S. Ahsan, expected graduation: Summer 2026, Current position: Graduate Research Assistant
J. McCoppin, graduated Fall 2013, Current position: Research Scientist, University of Dayton Research Institute.

M.S. students supervised

G. Matondo	current	Expected Summer 2025
T. Autore	current	Expected Spring 2024
T. Taylor	current	Expected Spring 2024
S. Ahsan	graduated	Spring 2023
E. Karunamurthy	graudated	Spring 2023
A. Dunn	graduated	Spring 2022
A. Black	graduated	Fall 2022
V. Pushparaj	graduated	Spring 2021
K. Doyle	graduated	Fall 2020
G. North	graduated	Spring 2020
E. Stang	graduated	Summer 2018
I. Wolford	graduated	Fall 2016
D. Beeler	graduated	Fall 2013
J. McCoppin	graduated	Spring 2010
E. Henderson	graduated	Spring 2006
S. Mellacheruvu	graduated	Winter 2006
R. Mammilapalli	graduated	Winter 2006
M. Gorantla	graduated	Winter 2006

Other thesis committee activity

Ph.D. thesis committee member	19 students
Ph.D. candidacy exam committee member	8 students
M.S. thesis committee member	18 students

Senior capstone teams advised

Pseudo-isostatic pressing for wood materials	F20-S21
Chemo-thermo-mechanical wood enhancement	F19-S19
Enhanced wood spars for drone applications	F19-S19
Enhanced wood materials for pallet applications	F19-S19
Design of thermal mold assist assembly	F17-S18
3D printer for braille writing	F16-S17
Smart blinker	F16-S17
Elastomeric 3D printing	F16-S17
3D printing via arc welding	F16-S17
Bamboo composites	F12-S13
Battle bots team	F11-S12

Related to undergraduate teaching and outreach

Wright State STEMM Experience, materials demos	2020-2022
The Big Hoopla, Dayton, materials demos	2022
Undergraduate MME faculty co-op coordinator	2020
Latinos in Engineering event, MSE demonstration and presentation	2014
WSU College of Engineering Direct Admit Orientation,	2011
Faculty Advisor, WSU ASM/TMS Joint Student Chapter,	2004-2010

Women in Engineering Open House	2008
Engineering outreach demos, grade school	2008
WSU Departmental Engineering open house (materials demos)	2008
Exploring Science Camp (4 days, materials demos)	2007
Developed Materials Lab I	2007
Guest Lecturer EGR 482 (EIT)	2005-2007
Developed reverse engineering lab for Introduction to Manufacturing	2005
Materials Demonstration, Ankeney Middle School, Beaver Creek	2004
Developed ME 4880/6880 to merge and replace two older courses	2004

Departmental service

Petitions	Member	2019-2022
Continuous quality and improvement	Chair	2018-present
Manufacturing program development	Member	2017-2019
ABET Accreditation	Chair	2015-2018
Director eng. comp. sci. math. search	Member	2014
Ad-hoc engineering math dev.	Member	2014
Micro-air vehicle faculty fearch (1 position)	Member	2012
Curriculum	Member	2006-2011, 2020
MSE faculty search (2 positions)	Member	2006-2007
Materials	Member	2004 -present
ABET accreditation	Member	2004-2015

College service

CECS Dean search	Member	2022-2023
Steering	Chair	2021-2023
Scholarship	Chair	2012-2013
Petitions	Member	2010-2011
Academic computing	Member	2005-2007
ME chair search	Member	2005
Scholarship	Member	2004-2006

Graduate school service

Ph.D. Focus Area Chair (Matls. & Nano.)	Chair	2010-2014, 2020-2022
Dissertation Qualified Faculty	Member	2005-present
WSU graduate faculty	Member	2004-present

University service

Core Oversight	Member	2019-2023
Scholarship	Member	2013
Academic Dishonesty Investigation Panel	Member	2012-2013
Academic Dishonesty Inquiry Panel	Member	2012

National and Professional Service

TMS Additive Manufacturing Committee	Member	2022-present
TMS Fall 2024 Symposium Organizer	Member	2024

1.1.2 Additive Manufacturing and Cellular/Lattice Structures: Designs, Realization and Applications

1.1.3 Additive Manufacturing: Microstructure, Defects, and Properties

1.1.6 Additive Manufacturing: Materials and Process Control and Development

ASM International Dayton Chapter	Chair	2017-Present
ASM Teachers Camp, Dayton region	Coordinator	2016-Present
ASM International Dayton Chapter	Treasurer	2011-2018

Other professional activities

Peer review panel moderator, 4 panels	AAAS/RCA	2018
Peer review panel moderator, 20+ panels	AAAS/KACST	2010-2016
Session Chair: Coatings: Processing I	MS&T	2005
Active peer reviewer (as requested)	Many archival journals, AFOSR, ASME, NRC, MDA, NRL/ASEE, state funding agencies, ASM Handbook	

Pending Funding (total external $401,624)

1. [co-I] T. Borkar, D. Young, A. Mian, etc. al, "Evaluation of Forging Preforms Fabricated via Additive Manufacturing Processes", America Makes Impact Project, 2023-2025, Funding: $401,624.

Current funding (total external $394,942)

1. [co-I] A. Palazotto, D. Young, "Comparison of IN 718 AM and Traditional Bulk Specimens Under High Energy Impact with an Additional Study of 3D Lattice AM Specimens," AFOSR BAA FA9550-23-S-0001 A.1.a, Engineering and Complex Systems (RTA1), Dynamic Materials and Interactions, 2023-2026, Funding: $289,896
2. [PI] D. Young, G. Matondo, "Study of Fiber-Loaded Slurries for Oxide-Oxide Composite Fabrication by Additive Manufacturing," Strategic Ohio Council for Higher Education DAGSI grant, 2023-2025, Total Funding: $88,260.
3. [Contributor] OASIS: Ohio-southwest Alliance on Semiconductors and Integrated Scalable Manufacturing, 2022-2024, Total Funding: $1,100,000 (not included in funding total).
4. [PI] D. Young, "Development of a Wright State Materials Characterization Facility in Support of On-Campus Research and Local Industry," Ohio Department of Higher Education, Third Frontier Research Incentive, 2022-2023, Funding: $16,696.

Past funding (total external $781,822, internal $73,000)

1. [PI] D. Young, "Study of Phosphate Absorption on Metallorganic Framework Surfaces and Materials Characterization," Pegasus Technical Services, Prime Contract EPA PR-ORD-21-00020, 2022-2023,
2. Funding: $45,838
3. [PI] D. Young, "Research into the Structural Dynamics and Mechanics of Gas Turbine Engine Components," 05/2021-08/2022, ARCTOS Technology Solutions, Prime Contract AFOSR FA8650-21-D-2014, F2021-2023, unding: $100,000.
4. [PI] D. Young, "Remove and Treat PFAS Wastewater," 02/2021-03/2021, EPA, Contract No. EP-C-15-010, Total Funding: $21,000.
5. [PI] D. Young, "Support for 2019 ASM International Teacher's Materials Camp in the Dayton Metro Region," 06/19-05/20, AFOSR BAA-AFRL-AFOSR-2016-0008, Total funding $12,600.
6. [PI] D. Young, R. Srinivasan, "Support for ASM International Teacher's Materials Camp in the Dayton Metro Region," 06/18-06/19, AFOSR BAA-AFRL-AFOSR-2016-0008, Total funding $12,600.
7. [PI] D. Young, "Optimization of an Overmolded Electronics Package Assembly," 12/17-04/19, Caterpillar Trimble Control Technologies, Total funding: $21,800.
8. [PI] D. Young, "Temperature Dependent Creep of Novel Solder Materials," 03/17-09/17, DfR Solutions LLC, Total funding $16,699.
9. [co-I] G. Huang, M. S. Ayyadurai, D. Young, "Numerical/Experimental Study of Functionally Graded Structures and Exploration of Micro Air Vehicles," 09/07-12/14, Optomec, Air Force Research Laboratory, Total funding: $113,485.
10. [PI] D. Young, "DfR Solutions Testing", 06/11-12/12, DfR Solutions LLC, Total funding $4,200.
11. [PI] D. Young, "Fabrication, Characterization and Testing of Graded Solid Oxide Fuel Cell Capacitor Layers," 06/06-12/10, Universal Energy Systems, Inc., Total funding: $72,600.
12. [PI] D. Young, "DfR Solutions Testing", 12/09-03/10, DfR Solutions LLC, Total funding $4,000.
13. [PI] D. Young, M. Ayyadurai, "Phase II SBIR: Direct Writing of Functionally Graded Solid Oxide Fuel Cells," 3/2007 – 3/2009, Optomec Inc., Total funding: $302,000.
14. [PI] D. Young, "Generation, Stabilization and Control of Fluidic Nanostructures," 05/05 – 08/08, American Chemical Society Petroleum Research Fund, Total funding: $35,000.

15. [PI] D. Young, “Ceramic Fiber Heterostructures,” 01/04-09/05, Ohio Space Grant Consortium, Total funding: $10,000.
16. [Internal] D. Young, “Scanning Electron Microscopy Expertise and Capabilities in Preparation for Integrated Circuit Packaging Research,” 01/06-06/09, WSU Early Start Augmentation, Total funding: $15,000.
17. [Internal] D. Young, R. Srinivasan, G. Gallimore, “A Major Collaborative Focus on Three Dimensional Display Technology,” 05/04-12/05, WSU Major Collaboration, Total funding: $33,000.
18. [Internal] D. Young, “Ceramic and Polymer Fiber Heterostructures,” 09/03-06/05, WSU Research Challenge, Total funding: $25,000.

Peer-Reviewed Journal Publications (https://orcid.org/0000-0001-9912-2320)

1. R. Tullis, A. Dunn, D. Young, N. Klingbeil, J. Gockel, “Additive Manufacturing Bulk Parameter’s Influence on Surface Roughness, Microstructure, and Fatigue” *JOM*, https://doi.org/10.1007/s11837-023-05779-6.
2. Abdelal, N., Dib, N., Young, D., “Electromagnetic interference shielding and dielectric properties of graphene nanoplatelets/epoxy composites in the x-band frequency range,” *J. Mater. Sci.* (2022). https://doi.org/10.1007/s10853-022-07475-3
3. J. R. McCoppin, M. S. Hanchak, L. J. Elston, D. Young, “Boil-Off Calorimetry Enthalpy Measurements and Equation of State of an Aqueous Pyridine Azeotrope,” *Intl. Journal of Refrigeration* (2021), doi:https://doi.org/10.1016/j.ijrefrig.2021.04.006
4. J.R. McCoppin and D. Young, “Mass Transport, Creep and Zero-Stress-Point Shifting in a Nano-Silver Die Attach Material During Thermal Cycling,” Journal of Electronic Materials, 49 (2020) 3982-3989.
5. J. McCoppin, T. Reitz, R. Miller, H. Jijwani, S. Mukhopadhyay, D. Young, “Low Temperature Consolidation of Micro/Nanosilver Die-Attach Preforms,” Journal of Electronic Materials, vol. 43 (2014) 3379-3388.
6. J. McCoppin, I. Barney, S. Mukhopadhyay, R. Miller, T. Reitz, D. Young, “Compositional control of continuously graded anode functional layer,” Journal of Power Sources, 215 (2012) 160-163.
7. J. McCoppin, D. Young, T. Reitz, A. Maleszewski, S. Mukhopadhyay, “Solid oxide fuel cell with compositionally graded cathode functional layer deposited by pressure assisted dual-suspension spraying,” Journal of Power Sources, 196 (2011) 3761–3765.
8. D. Young, M. A. Sukeshini, R. Cummins, H. Xiao, M. Rottmayer, T. Reitz, “Inkjet Printing of Electrolyte and Anode Functional layer for Solid Oxide Fuel Cells,” Journal of Power Sources, vol. 184 (2008) 191-196.
9. M. Gorantla, S. E. Boone, C. Clark, R. Esser, M. El-Ashry, D. Young, "Extrusion of a Solvated Polymer Into a Moving Viscous Medium Allows Generation of Continuous Polymer Nanofibers Via Hydrodynamic Focusing," Journal of Materials Research, vol. 12 no. 4, (2007) 989-993.
10. B. R. Ringeisen, C. M. Othon, J. A. Barron, D. Young and B. J. Spargo, "Jet-based methods to print living cells," Biotechnology Journal, vol. 1, no. 9 (2006) 930-948.
11. M. Gorantla, S. E. Boone, M. El-Ashry, D. Young, "Continuous polymer nanofibers by extrusion into a viscous medium: A modified wet spinning technique", Applied Physics Letters, vol. 88 no. 7, 2006.
12. J. Barrons, D. Young, B. R. Ringeisen, D. D. Dlott, D. Krizman, M. Darfler, “Printing of Protein Microarrays via a Capillary-Free Fluid Jetting Mechanism” Proteomics vol, 16 no, 5 (2005) 4138-4144.
13. D. Young, R. C. Y. Auyeung, A. Piqué, D. B. Chrisey, D. D. Dlott , “Plume and Jetting Regimes in a Laser Based Forward Transfer Process as Observed by Time-Resolved Optical Microscopy,” Applied Surface Science, no. 197 (2002) 181-187.
14. B. R. Ringeisen, P. K. Wu, H. Kim, A. Pique, R. Y. C. Auyeung, D. Young, D. B. Chrisey, D. B. Krizman, "Picoliter-scale protein microarrays by laser direct write," Biotechnology Progress, vol. 18 no. 5 (2002)1126-1129.
15. B. R. Ringeisen, D. B. Chrisey, A. Pique, D. Young, R. Modi, M. Bucaro, J. Jones-Meehan, B. J. Spargo, “Generation of Mesoscopic Patterns of Viable Escherichia Coli by Ambient Laser Transfer,” Biomaterials, vol. 23 (2002) 161-166.
16. D. Young, R. C. Y. Auyeung, A. Piqué, D. B. Chrisey, “Time Resolved Optical Microscopy of a Laser-Based Forward Transfer Process,” Applied Physics Letters, vol. 78 (2001) 3139-3171.
17. D. Young, H. D. Wu, R. C. Y Auyeung, R. Modi, J. Fitz-Gerald, A. Pique, D. B. Chrisey, P. Atanassova, T. Kodas, “Dielectric Properties of Oxide Structures by a Laser-Based Direct Writing Method,” Journal of Materials Research, vol. 16 (2001) 1720-1725.

18. D. B. Chrisey, A. Pique, R. Modi, H. D. Wu, R. C. Y. Auyeung, D. Young, R. Chung, "Direct Writing of Conformal Mesoscopic Electronic Devices by MAPLE-DW," Applied Surface Science, vol. 168 (2000) 345-352.
19. O. C. Wilson, Jr., T. Olorunyolemi, A. Jaworski, L. Borum, D. Young, A. Siriwit, E. Dickens, C. Oriakhi, M. Lerner, "Surface and Interfacial Properties of Polymer-Intercalated Layered Double Hydroxide Nanocomposites," Applied Clay Science (special issue, Clay Mineral Nanocomposites), October 1998.
20. A. M. Dhote, S. Madhukar, D. Young, T. Venkatesan, R. Ramesh, C. M. Cotell, and J. M. Benedetto, "Low Temperature Growth and Reliability of Ferroelectric Memory Cell Integrated on Si with Conducting Barrier Stack," Journal of Materials Research, vol. 12 (1997).
21. G. Zhang, S. Ng, D. Le, and D. Young, "Hardness Assessment of Human Enamel," 1997 International Association for Dental Research.
22. D. Young, A. Christou, and R. Ramesh, D. K. Fork, B. Krusor, "Growth of (001) Oriented La-Sr-Co-O/Pb-La-Zr-Ti-O/La-Sr-Co-O Ferroelectric Capacitors on (001) GaAs with a MgO Buffer Layer," Integrated Ferroelectrics, vol. 12 (1996) 63-69.
23. D. Young, A. Christou, "Failure Mechanism Models for Electromigration" IEEE Transactions on Reliability, vol. 43 (1994) 2.

Conference presentations, posters and workshops

1. D. Russel, D. Young, "Enhancing Micro-Silver Sintering for Electronic Heat Sinks," 2023 OSGC Student Research Symposium, Ohio Aerospace Institute, Space Grant Consortium 2023, Cleveland OH 3/31/2023.
2. A. Hall, A. Gay, S. Kanel, D. Young, S. Higgins, "Removal of Per- and Polyfluoroalkyl Substances (PFAS) From Water Supplies Using Clay Materials," Wright State University College of Science and Mathematics Festival of Research, 3/31/2023.
3. J. Gockel, E. Glaubitz, R. Tullis, J. Lujan, G. Hommer, S. Richardsen, A. Dunn, D. Young, N. Klingbeil, "Influence of Additive Manufacturing Surface Roughness and Microstructure on Fatigue Failure," APICAM 2023 Keynote Speaker, University of Sydney, New South Wales, Australia, 6/2023.
4. A. Dunn, D. Young, J. Gockel, "Build Geometry and Parameter Influence on Alloy 718 Microstructure, Properties and Spatial Variation in Additive Manufacturing," 2023 TMS Annual Meeting, Symposium: Quantifying Microstructure Heterogeneity for Qualification of Additively Manufactured Materials, 3/19/2023-3/23/2023.
5. A. Al Yasari, D. Young, R. Srinivasan, "The Effect of Si on Tungsten Aluminide Formation and Growth," 2022 Materials Science and Technology, Session: Development in Light Weight Alloys and Composites, Microstructure, Processing and Mechanical Properties, 10/12/2022.
6. D. Russel, J. McCoppin, T. Taylor, E. Kreit, D. Young, "Enhancing the Low-Temperature Consolidation of Nanosilver Materials," 2022 Materials Science and Technology, Session: Controlled Synthesis, Processing and Applications of Structural and Functional Nanomaterials, 3/10/2022.
7. A. Dunn, H. Young, J. Gockel, "Size and Processing Parameter Effects in Laser Powder Bed Fusion of Inconel 718," 2022 Solid Freeform Fabrication, Symposium: Materials: Metals – Nickel-Based Superalloys, 7/25/2022-7/27/2022.
8. J. Gockel, C. Lesko, A. Dunn, D. Young, L. Sheridan, "Intentional and Unintentional Spatial Variation in Laser Powder Bed Fusion," 2022 TMS Annual Meeting & Exhibition, Symposium: Additive Manufacturing: Nano/Micro-mechanics and Length-Scale Phenomena, 2/27/2022-3/3/2022
9. C. Lesko, D. Young, E. Stang, "Characterization of Crystal Deformation and Phase Segregation Due to Creep," 2019-2020 Cedarville University Virtual Research and Scholarship Symposium: April 8-22, 2020.
10. C. Lesko, D. Young, E. Stang, "Materials characterization of solder creep specimens," 45th Dayton-Cincinnati Aerospace Sciences Symposium: March 3, 2020, Sinclair Conference Center, Dayton Ohio.
11. J. McCoppin, "Mass transport analysis of nano-silver tape cast solder," 2013 ASME Dayton Engineering Science Symposium: October 29, 2013, Wright State University, Dayton OH.
12. J. McCoppin, H. Vijwani, R. Miller, M. Rottmeyer, T. Reitz, S. Mukhopadhyay, D. Young, "Fabrication and Optimization of Low Temperature Sintering Die Attach Preforms via the Tape Casting Method," 2012 Midwest SAMPE Student Symposium: February 28, 2012, National Composite Center, Kettering OH.
13. J. McCoppin, H. Vijwani, R. Miller, M. Rottmeyer, T. Reitz, S. Mukhopadhyay, D. Young, "Fabrication and Optimization of Low Temperature Sintering Die Attach Preforms via the Tape Casting Method," 2011 ASME Dayton Engineering Science Symposium: October 24, 2011, Wright State University, Dayton OH.

14. D. Young, M. Gorantla, S. Boone, C. Clark, M. El-Ashry, "Extrusion of a solvated polymer into a moving viscous medium allows generation of 300nm polymer fibers via hydrodynamic focusing," TMS 2007, Session: General Abstracts: MPMD, 3/1/2007.
15. J. C. Biffinger, B. R. Ringeisen, R. Ray, B. Little, D. Beeler, L. Long, E. Henderson, D. Young, R. Srinivasan, "The Effect of Electrode Material on Performance of a Miniature Microbial Fuel Cell Operating With Aerobic Shewanella oneidensis DSP10," TMS 2006, 3/12/2006.
16. M. K. Gorantla, S. Mellacheruvu, D. Young, "Fabrication and Fiber mechanics of Nanofibers Produced by a Modified Wet Spinning Technique," Materials Science and Technology 2005, Session: Nanomaterials: Nanomaterials Synthesis and Characterization, 9/27/2005.
17. D. Young, R. C. Y. Auyeung, A. Pique, D. B. Chrisey, D. D. Dlott, "Laser Forward Transfer of Fluids," SPIE Photonics West, LAMOM 4637A-81.
18. D. Young, H.D. Wu, R. Modi, H. Denham, A. Pique, D.B. Chrisey, "Laser-Direct Writing of Conductor and Dielectric Multilayers for Storage Capacitor Applications," Materials Research Society Fall Meeting, 2001.
19. D. Young, R. C. Y. Auyeung, H. Denham, A. Pique, D. B. Chrisey, "Ultra High-Speed Imaging of a Laser Forward Transfer Process Using a Colloidal Ink Layer," Materials Research Society Fall Meeting, 2001.
20. D. Young, R. C. Y. Auyeung, A. Piqué, D. B. Chrisey, D. D. Dlott , "Dynamics of Plume Generation in a Laser Forward Transfer Process," Conference on Laser Ablation 2001, October 1-5, Tsukuba, Japan.
21. B. Ringeisen, D. B. Chrisey, A. Pique, D. Young, R. Modi, B.H. Thompson, R. Chung, "Direct Writing of Passive and Active Circuits and Coatings on Insects," Darpa Insect Tracking Workshop, August 2-3, Southwest Research Institute, San Antonio, TX.
22. R. C. Y. Auyeung, H. D. Wu, R. Modi, A. Pique, J. M. Fitz-Gerald, D. Young, S. Lakeou, R. Chung, D. B. Chrisey, "Matrix Assisted Laser Transfer of Electronic Materials for Direct Write Applications," Laser Processing of Materials 2000, Omiya Sonic City, Saitama, Japan.
23. L. J. Martinez-Miranda, O. C. Wilson Jr, I. Aninye, P. Vakil, D. Young, "Liquid Crystal Behavior of the Self-Alignment and OrinetationalTransformations in Al-Fe Hydroxide Nanoparticles," Meeting of the American Physical Society, March 20 - 24, 2000, Minneapolis, MN.
24. L. J. Martinez-Miranda, O. C. Wilson Jr, I. Aninye, P. Vakil, D. Young, "Self-alignment and orientational transformations in Al-Fe hydroxide nanoparticles," Materials Research Society Fall Meeting, 1999, Boston, MA.
25. O. C. Wilson, Jr., T. Olorunyolemi, A. Jaworski, L. Borum, D. Young, E. Dickens, C. Oriahki, "Surface Properties of Layered Double Hydroxide Nanocomposites," Bioceramics: Materials and Applications (Proceedings from American Ceramic Society, 1999).
26. D. Young, R. Ramesh, A. Christou, "Optical Phase and Amplitude Modulation in (9/65/35) Pb-La-Zr-Ti-O Thin Films," Materials Research Society Fall Meeting, 1998.
27. A. Dimoulas, R. Tober, D. Young, R. Levitt, A. Christou, "Strain Related Excitonic In-Plane Optical Anisotropy in (100) InGaAs / InAlAs / InP Multiple Quantum Wells," 23rd International Conference on Compound Semiconductors, St. Petersburgh, Russia, 1996, published in Inst. Phys. Conf. Ser., #155, 1997, Chapt. 2, pps. 69-72.
28. D. Young, R. Ramesh, and A. Christou, "Ferroelectric La-Sr-Co-O/Pb-La-Zr-Ti-O/La-Sr-Co-O Oxide Heterostructures Grown on (001) GaAs and (001) Si," Materials Research Society Fall Meeting, 1995.

Patents

1. G. Boivin, D. Young, "Small Animal Clear Nesting Material," Publication #20160219830 (2016)
2. D. Young, "Fabrication of small diameter continuous fibers," (awarded 5/25/2010), U. S. Patent #7,722,796.
3. D. Young, R.C.Y. Auyeung, B.R. Ringeisen, D.B. Chrisey, D. Dlott. Jetting Behavior in the Laser Forward Transfer of Rheological Fluids, (awarded 11/2004), U.S. Patent #6,815,015.
4. R.C.Y. Auyeung, D. Young, R. Modi, H.D. Wu, B.R. Ringeisen, J. Fitz-Gerald, D.B. Chrisey. Laser Forward Transfer of Rheological Systems. (awarded 10/2004), US Patent #6,805,918.

Nonrefereed publications

1. A. Dimoulas, R. Tober, D. Young, R. Levitt, A. Christou, “Strain Related Excitonic In-Plane Optical Anisotropy in (100) InGaAs / InAlAs / InP Multiple Quantum Wells,” Institute of Physics Conference Series, vol. 155 (1997) 69-72.
2. D. Young, R. Ramesh, and A. Christou, “Ferroelectric La-Sr-Co-O/Pb-La-Zr-Ti-O/La-Sr-Co-O Oxide Heterostructures Grown on (001) GaAs and (001) Si,” Fall Materials Research Society Symposium vol. 401 (1995) G6.6.

Book chapters and contributions

1. Acknowledged contribution, X. Hong, K. W. Desmond, D. Chen, E. R. Weeks, “Clogging and avalanches in quasi-two-dimensional emulsion hopper flow,” *Phys. Rev.* 105, 014603 (2022). DOI: 10.1103/PhysRevE.105.014603
2. (k-12) “By Design Science,” pub. Kendall Hunt, chapter editor, 03/14.
3. (k-12) “Physics: Principles and Problems TE”, pub. Glencoe, chapter editor, 04/11.
4. “Virtual Prototyping and Bio Manufacturing in Medical Applications,” Eds. B. Bidanda and P. Bartolo. Chapter 10: "Laser Printing Cells" B. Ringeisen, J. Barron, D. Young, C. Othon, D. Ladoucuer, P. Wu, B. Spargo, Springer Science+Business Media, LLC, 2008.
5. Acknowledged contribution, W. Smith and J. Hashemi, "Foundations of Materials Science" 4th Ed. (2005).
6. “Direct-Write Technologies for Rapid Prototyping Applications,” eds. A. Pique, D. B. Chrisey, Academic Press. Chapter 17, “Matrix Assisted Pulsed Laser Evaporation Direct Write (MAPLE-DW): A New Method to Rapidly Prototype Organic and Inorganic Materials,” J. M. Fitz-Gerald, P. D. Rack, B. Ringeisen, D. Young, R. Modi, R. Auyeung, H.-D. Wu., 2001.
7. Acknowledged contribution, Reliability Engineering and Risk Analysis: A Practical Guide, M. Modarres, M. Kaminskiy, and V. Krivtsov, Marcel Dekker (1999).

Invited talks at conferences and workshops

1. M. El-Ashry, D. Young, "3D Displays based on Deformable Polydimethylsiloxane (PDMS) Lenticulars”, Materials Science and Technology, Session: The Physics and Materials, 2005. Challenges for Integrated Optics - A Step in the Future for Photonic Devices, 9/26/2005.
2. D. B. Chrisey, D. Young, "Laser Manufacturing of Engineered Tissue Constructs for Tissue-Based Biosensors," NSF sponsored International Workshop for Biomanufacturing, Beijing, China, 6/29/2005.
3. D. Young, B. R. Ringeisen, P. K. Wu, H. S. Kim, B. Spargo, A. Pique, R. C. Y. Auyeung, D. B. Chrisey, D. B. Krizman, “Cell-by-Cell Construction of Living Tissue,” SPIE Photonics West, LAMOM 4637A-46, 2002.

Publicity

1. Trade journal article, "The Future of Direct Writing in Electronics", D. Young, S. Sampath, B. Chichkov, and D.B. Chrisey. CircuiTree, cover story, 2/2005.

Colloquia and seminars

1. WSU CFE Faculty Research Symposium, 02/23
2. AFRL/RYDD, 05/21
3. AFRL/RYDD, 05/20
4. WSU Ph.D seminar, 02/20
5. ASM Dayton Teachers Camp, 06/19
6. WSU Ph.D seminar, 02/18
7. WSU Ph.D. seminar, 10/04
8. AFRL/RXCCM, 11/03