

George Elvin, PhD

Curriculum Vitae

Employment

- 2005-present Associate Professor, Department of Architecture, Ball State University, Muncie, IN
- 2006-present Owner, Gone Studio, Indianapolis, IN
- 1999-2005 Assistant Professor, School of Architecture, University of Illinois at Urbana-Champaign, Champaign, IL
- 1981-1999 Principal, Providence Builders, Washington, DC

Education

- 1998 University of California at Berkeley, Ph.D. Architecture
- 1995 University of California at Berkeley, M.A. Architecture
- 1991 University of Maryland, College Park, B.S. Architecture

Presentations

- 2015 *Post-Petroleum Design: Practices and Principles*, Architectural Research Centers Consortium Conference, April 8, Chicago
- 2014 *Post-Petroleum Building Materials*, Technology Summit, American Institute of Architects, Indiana Chapter, November 19, Indianapolis
- 2013 *Post-Petroleum Design*, Construction Specifications Institute, Nashville Chapter, March 19, Nashville
- 2012 *Greensleeve Case for iPad*, presented at Deep Craft Atelier, San Francisco StoreFrontLab

Nanotechnology and Interior Design: Breakthroughs and Precautions, Hotel Interior Design - The Decision Makers' Forum, May 11, Split, Croatia

2011

Nanotechnology in Architecture: New Risks and Rewards, Buildgreen Argentina, October 25, Buenos Aires, Argentina

Nanotechnology for Green Architecture, Arc-Latin America, June 24, San Jose, Costa Rica

Nanotechnology in Architecture: New Risks and Rewards, Arc-US, November 18, Boca Raton, Florida

Nanotechnology for Smart Sustainable Buildings, Humanscale Design Smart Seminar, March 31, Washington, DC

Nanotechnology for Smart Sustainable Buildings, Humanscale Design Smart Seminar, April 22, Los Angeles

Nanotechnology for Interior Design, Hospitality Design Expo, May 19, Las Vegas

2010

Nanotechnology and Interior Design: A Revolution in Materials, International Forum for Architecture and Construction, March 9, Sao Paulo, Brazil

Nanotechnology for Smart Sustainable Buildings, Humanscale Design Smart Seminar, February 4, New York

Nanotechnology for Smart Sustainable Buildings, Humanscale Design Smart Seminar, March 23, Boston

Nanotechnology for Smart Sustainable Buildings, Humanscale Design Smart Seminar, April 25, San Diego

Nanotechnology for Smart Sustainable Buildings, Humanscale Design Smart Seminar, August 24, Atlanta

Nanotechnology for Green Architecture, Arc-Middle East, November 1, Limassol, Cyprus

2009

Nanotechnology for Green Architecture, Arc-US: Forum for America's Leading Architects, November 20, Bonita Springs, Florida

Nanotechnology for Green Interior Design: Tomorrow's Technologies Today, Arc-Interiors, September 25, Miami

- 2008 *Sustainability in Action*, Keynote address, Opening of Biomax biofuel plant, June 17, Bogotá, Colombia
- 2007 *Clean Technologies for Green Building*, Cleantech 2007 Conference, May 20-24, Santa Clara, California
- 2006 *Health Effects of Architectural Applications of Nanotechnology*, Nano & Bio in Society Conference, Aug. 9-10, Chicago
- NanoStudio*, ACADIA International Conference Digital Exchange Exhibition, September 12-15, October 12-15, Louisville
- NanoStudio: Experimental Applications of Nanotechnology in Architecture*, 2006 Nano Science and Technology Institute Nanotechnology Conference, May 7-11, Boston
- 2005 *Nanotechnology Applications in Construction*, Arc-US: America's Leading Architects Forum, November 18, Miami
- 2003 *Wearable Computers for Integrated Design and Construction*, American Society of Civil Engineers Construction Research Congress, March 19-23, Honolulu
- 2002 *CDP – Collaborative Design Processes: A Classroom Based Study Serving as a Laboratory for Studying A/E/C Distributed Design*, Soibelman, L., O'Brien, W. and Elvin, G., Workshop on the Role of Empirical Studies in Understanding and Supporting Engineering Design, National Institute of Standards and Technology, Gaithersburg, Maryland, April 4-5
- Collaborative Design Processes: Technology and Teamwork in A/E/C Education*, with Lucio Soibelman and William O'Brien, 9th ISPE International Conference on Concurrent Engineering, July 27-31, Cranfield University, United Kingdom
- 2001 *Integrated Practice: Strategies for the Next Generation Architect*, American Institute of Architects National Convention, May 17-19, Denver
- Transformer: The Work of the Architect between Idea and Object*, Association of Collegiate Schools of Architecture National Meeting, March 16-20, Baltimore
- Synchronizing Workflow Planning in Simultaneous Design and Construction*, with Lucio Soibelman and William O'Brien, 1st International Conference on Innovation in Architecture, Engineering and Construction, July 18-20, Loughborough, England

- 2000 *Integration and Adaptation in Architectural Process: Strategies for Project Organization, Planning and Communication*, ACSA Technology Conference, Emerging Technologies and Design, Massachusetts Institute of Technology, July 14-17, Cambridge MA,
- The Art of Communication in Simultaneous Design and Construction*, International Council for Research and Innovation in Building and Construction Conference, Design Management in the Engineering and Architectural Office, GA Tech, May 19-20, Atlanta,
- On-site Design: The Convergence of Material and Information*, ACSA East Central Regional Conference, November 3-5, University of Michigan
- The Next Generation Architect in Integrated Practice*, Form, Function, Future: The Expanding Dimensions of Architectural Practice, American Institute of Architects, Oct 15-17, Portland OR
- Strategies for Web-Based Collaboration*, Excellence through Design-Build and the Borderless Market, AIA / Canadian Design-Build Institute joint conference, March 23-25, Toronto

Publications

- 2011 *Principles of Integrated Practice in Architecture*, Journal of Architectural and Planning Research, Volume 27, Number 4, pp. 287-300
- 2008 *Nanotechnology: Killing Germs on the Frontline*, Door and Hardware, February 2008, <http://www.accessmylibrary.com/article-1G1-175075195/nanotechnology-fighting-germs-frontline.html>
- 2007 *Nanotechnology: New Architectural Materials for a Green Future*, 2A: Art + Architecture, Number 6, Autumn 2007, pp. 78-81, <http://www.2amagazine.com/default.aspx?categoryID=0&name=issue6&lang=en>
- The Nano Revolution*, Architect, May 2007, pp.93-96
- 2006 *Risks in Architectural Applications of Nanotechnology*, nanoRISK, 2006/3
- Will Nanotechnology Lead Green Revolution?* www.lime.com, August 11, http://www.lime.com/technology/story/3993/op-ed_will_nanotechnology_lead_green_technology_revolution

The New Era of Nanosensors, Nano & Society, Sep. 2006, http://www.nano-and-society.org/commentaries/commentary_elvin.html

Bacteria Powered Batteries, www.lime.com, September 15, http://www.lime.com/technology/story/4429/bacteria-powered_batteries

Farmland Fillup: Understanding the Biofuel Boom, www.lime.com, October 5, http://www.lime.com/technology/story/5026/farmland_fillup_understanding_the_biofuel_boom

2005 *Nanotechnology and Design*, 2nd International Symposium on Nanotechnology and Construction, November 13-16, Bilbao, Spain, <http://www.rilem.net/fiche.php?cat=conference&reference=pro045-039>

2004 *Integrating Design and Construction with Wearable Computers*, International Journal of Architectural Computing, Issue 2, Volume 2, June 2004, pp. 178-187

2003 *Collaborative Design Processes: An Active and Reflective Learning Course in Multidisciplinary Collaboration*, O'Brien, W.J., Soibelman, L., and Elvin, G., Journal of Construction Education, Summer 2003, pp. 78-93

Books and Book Chapters

2015 *Post-Petroleum Design*, London: Routledge

Nanotechnology in Architecture, in Nanotechnology for Energy Sustainability, Yashwant Mahajan ed., New York: John Wiley & Sons (contract signed, publication in 2016)

2012 Contributing author, P. Petricone, *Concrete Ideas: Materials to Shape a City*, Buenos Aires, Oscar Riera Ojeda Publishers

2007-2011 Editor-in-Chief, *Research for Practice: The American Institute of Architects Report on University Research*

2009 *Integrated vs. Traditional Practice*, chapter section, in The Architecture Student's Handbook of Professional Practice, New York: AIA/John Wiley & Sons

2007 *Integrated Practice in Architecture: Mastering Design-Build, Fast-Track and Building Information Modeling*, New York: AIA/John Wiley & Sons

- 2004 *Reconfigurable Systems*, in Good Deeds, Good Design, Bryan Bell, ed., Princeton Architectural Press, pp. 31-36
- 2003 *Design-Build Education*, with William Carpenter, in The Architect's Guide to Design-Build Services, AIA/John Wiley & Sons, pp. 373-386

Fellowships, Honors and Awards

- 2015 *Greensleeve Case for iPad* (creative project) exhibited at StoreFrontLab, San Francisco, July 23-August 12
- President's Travel Fund, Award, \$335, *Post-Petroleum Design: Practices and Principles*, Architectural Research Centers Consortium Conference, April 8, Chicago
- College of Architecture and Planning Micro Grant, \$1925, *Space in Motion*
- College of Architecture and Planning Mini Grant, \$655, *Post-Petroleum Design Lab*
- 2014 Keep Indianapolis Beautiful, Contract, \$5,000, *Meridian Park Neighborhood Park Play Structure*
- College of Architecture and Planning Mini Grant, \$1000, *Meridian Park Neighborhood Park Play Structure*
- 2010 American Institute of Architects, Contract, *Report on University Research Vol. 4*, \$20,000
- 2009 American Institute of Architects, Contract, *Report on University Research Vol. 3*, \$20,000
- 2008 American Institute of Architects, Contract, *Report on University Research Vol. 2*, \$25,000
- 2007 American Institute of Architects, Contract, *Report on University Research Vol. 1*, \$25,000
- 2006 Fellow, Center for Energy Research, Education and Service, Ball State University, for *Energy Conservation Capabilities of Nanomaterials*
- 2005 Visiting Research Fellow, Institute for Advanced Study in the Humanities, University of Edinburgh, for *Small Plans: Nanotechnology, Architecture, and the Future of the Built Environment*
- 2003 Outstanding Instructor, Instructor and Course Evaluation (UIUC)

Campus Research Board (UIUC), *Wearable computers for Integrated Design and Construction*, \$22,127

- 2000 Technology Fellow, Association of Collegiate Schools of Architecture
Outstanding Instructor, Instructor and Course Evaluation (UIUC)
Campus Research Board (UIUC), *Integrated Practice in Architecture*, January, \$18,240

Professional Accreditation

- 2009-present Accredited Professional, Leadership in Energy and Environmental Design (LEED AP)
2015 Member, American Energy Society

Professional Service

- 2015 Reviewer, *Journal of Architectural Engineering* submission
Reviewer, *Wiley* book submission
Reviewer, *TechConnect World Innovation Conference* submissions, Washington DC, June 14-17
- 2014 Reviewer, *Perkins + Will Research Journal* submission
Reviewer, *TechConnect World Innovation Conference* submission, Washington DC, June 15-18
- 2012 Chair, *Green Building Symposium*, Clean Technology Conference and Expo, Santa Clara, California, June 18-21
Instructor, *Green Building: Technologies and Opportunities*, Cleantech Conference, Santa Clara, California, June 18
- 2011 Instructor, *Cost-Effective Green Building Retrofits*, Singapore, April 18-19
Design Group Leader, National Science Foundation, *Research in Materials and Manufacturing for Extreme Affordability Workshop*, Muncie, Indiana, March 18-19
Instructor, *Green Building: Technologies and Opportunities*, Clean Technology Conference and Expo, Boston, June 12

- Chair, *Green Building Symposium*, Clean Technology Conference and Expo, Boston, June 13-15
- 2010 Chair, *Green Building Symposium*, Clean Technology Conference and Expo, Los Angeles, June 22-25
- Instructor, *Cost-Effective Intelligent Green Building*, Singapore, March 1-2
- Instructor, *Energy-Efficient Building Envelope Design and Construction*, seminar, Indianapolis, November 18
- Instructor, *Economics of Green Building*, webinar, brightTALK Green Building Summit, April 22, 2010, <http://www.brighttalk.com/community/green-building/webcast/691/6105>
- Instructor, *Green Building: Technologies and Opportunities*, tutorial, Cleantech Conference, Los Angeles, June 21
- 2009 Member, Sustainability Committee, College of Architecture and Planning, Ball State University
- Instructor, *Integrated Practice*, Continuing Professional Education Course, Wiley, <http://www.wiley.com/WileyCDA/Section/id-320255.html>
- Instructor, *Nanotechnology for Green Building*, webinar, brightTALK Green Building Summit, April 22, <http://www.brighttalk.com/webcasts/2817/play>
- Instructor, *Greening Existing Buildings: Retrofitting Residential and Small Commercial Buildings*, seminar, Indianapolis, July 16
- Chair, *Green Building Symposium*, Clean Technology Conference and Expo, Houston, May 2-5
- Instructor, *New Clean Technologies for Green Building*, tutorial, Cleantech Conference, Houston, May 2-5
- Member, Organizing Committee, Clean Technology Conference and Expo, Boston, Houston, May 2-5
- Reviewer, article manuscript, Journal of Nano Education
- Reviewer, article manuscript, Journal of Management in Engineering
- 2008 Advisor, major international plumbing fixtures corporation (NDA), long-term corporate

strategies for future of home water management

Chair, American Institute of Architects RFP Program, American Institute of Architects Convention, Boston, May 16

Reviewer, Greenbuild International Conference and Expo, Boston, Nov. 19-21

Member, Organizing Committee, Clean Technology Conference and Expo, Boston, June 1-5

- 2006 Reviewer, *Nanotechnology: Health and Environmental Risks of Nanoparticles*, BAuA (Federal Institute for Occupational Safety and Health), UBA (Federal Environment Agency), and BfR (Federal Institute for Risk Assessment) Federal Republic of Germany
- Industry Forum Member, Conference on Nanotechnology Occupational and Environmental Health & Safety, Cincinnati, Dec. 4-7
- Reviewer, 2006 ACADIA conference
- Reviewer, Illinois Institute of Technology Interprofessional Projects Program
- 2005-2007 Author, nanotechbuzz.com, nanotechnology blog
- 2003 Invited Member, Nominating Committee, MacArthur Fellows Program
- Founding Member, Mobile Computing Technologies in Construction Project
- 2002 Co-Chair, American Institute of Architects / Association of Collegiate Schools of Architecture conference, *Experiences in Design-Build: The Expanding Dimensions of Practice and Education*, February 15-17, Atlanta
- Reviewer, *Architect's Handbook of Professional Practice, Student Edition*, New York: Wiley and Sons
- Submissions Reviewer, *Fully Integrated and Automated Project Processes International Conference*, Virginia Tech, January 23-25
- Moderator, Association of Collegiate Schools of Architecture National Meeting Special Focus Session, *Design-Build: Practice and Pedagogy*, April 12, New Orleans
- 2001 Moderator, Association of Collegiate Schools of Architecture National Meeting Special Focus Session, *Educating the Architect in the Age of Design-Build*, March 19, 2001, Baltimore, MD

Professional Memberships

- 2007-present U.S. Green Building Council
Cradle to Cradle Environmental Design Community
- 2005-present American Society for the Advancement of Sustainability in Higher Education
- 2006-2007 One Percent for the Planet Alliance
- 2001-2002 Design-Build Advisory Board, American Institute of Architects
- 1998-2003 Education and Research Committee, Design-Build Institute of America

Citations and Interviews

- 2015 *Post-Petroleum Design*, Book review, *Auto & Design*, Volume 6, November/December 2015, p. 79
- The Latest in Cleantech: Designing a Post-Petroleum World*, New Zealand Herald, June 30, http://www.nzherald.co.nz/element-magazine/news/article.cfm?c_id=1503340&objectid=11472101
- P Sisson, *Post-Petroleum Design and the Future of Sustainable Materials*, *curbed.com*, <http://curbed.com/archives/2015/05/21/postpetroleum-design-and-the-materials-making-architecture-and-design-more-sustainable.php>
- S Rokoei, *Building Information Modeling in Project Management: Necessities, Challenges and Outcomes*, *Procedia: Social and Behavioral Sciences*, Volume 210, pp. 87–95
- SC Ugochukwu, SC Akabogu and KC Okolie, *Status and Perceptions of the Application of Building Information Modeling for Improved Building Projects Delivery in Nigeria*, *American Journal of Engineering Research*, Volume 4, Issue 11, pp 176-182
- R Soetanto et al., *Key Success Factors and Guidance for International Collaborative Design Projects*, *International Journal of Architectural Research*, Volume 9 Number 3, pp. 6-25
- BS Santosh and TP Madhavi, *Nanomaterials: Application and Techniques in Civil Engineering* *Journal of Civil Engineering and Environmental Technology*, Volume 2 Number

5, pp. 456-460

B Kincl and S Matoš, *Pedestrianisation and Parking Policy as a Solution towards Green Transport Plan: A Case Study of Zagreb*, Journal of Civil Engineering and Architecture, Volume 9, pp. 1079-1084

IE Esparragoza et al., *Assessment of Interaction in Multinational Projects: A Comparison Based on Geographical Location*, Proceedings of 2015 International Conference on Interactive Collaborative Learning, Florence, Italy 20-24 September

RB Austin, P Pishdad-Bozorgi and JM de la Garza, *Identifying and Prioritizing Best Practices to Achieve Flash Track Projects*, Journal of Construction Engineering and Management, Volume 142 Issue 2

S Tahrani et al., *Structuring the Adoption and Implementation of BIM and Integrated Approaches to Project Delivery Across the Canadian AECO Industry*, Canadian Society for Civil Engineering's 5th International Construction Specialty Conference, Vancouver, British Columbia, 8-10 June, pp 1-10

V Muñoz and Y Arayici, *Using Free Tools to Support the BIM Coordination Process into SMEs*, Building Information Modelling (BIM) in Design, Construction and Operations, L Mahdjoubi, CA Brebbia and R Laing, eds., Boston: WIT Press, pp. 33-44

T Marzi, *Nanostructured Materials for Protection and Reinforcement of Timber Structures: A Review and Future Challenges*, Construction and Building Materials, Volume 97, pp. 119-130

S Rotar, *Improving Student Learning Through Integrated Project Experiences*, Landscape Research Record No. 01, Council of Educators in Landscape Architecture

MS Hakiki, C Utomo, *Faktor Kritis Penentu Keberhasilan Kolaborasi Desain pada Perusahaan Properti di Jawa Timur*, Proceedings of the National Seminar on Management technology, Surabaya, Indonesia, 2 February, pp. 1-8

M Adya, BK Temple and DM Hepburn, *Distant yet Near: Promoting Interdisciplinary Learning in Significantly Diverse Teams through Socially Responsible Projects*, Decision Sciences Journal of Innovative Education, Vol 13 Issue 2, pp. 121-149

A Heydarian et al., *Immersive Virtual Environments Versus Physical Built Environments: A*

Benchmarking Study for Building Design and User-Built Environment Explorations,
Automation in Construction, Volume 54, pp. 116–126

S Alizadehsalehi, O Koseoglu and M Celikag, *Integration of Building Information Modeling (BIM) and Laser Scanning in Construction Industry*, Proceedings of the 6th Biennial Professional Conference of the Architectural Engineering Institute, Milwaukee, Wisconsin, 24-27 March, pp. 163-174

2014

CTW Chan and W Sher, *Exploring AEC Education through Collaborative Learning*, Engineering Construction & Architectural Management, Volume 1 Number 25, 2014, p. 21

DA Altun and B Örgülü, *Towards a Different Architecture in Cooperation with Nanotechnology and Genetic Science: New Approaches for the Present and the Future*, Architecture Research, Volume 4 Number 1B, pp. 2, 7

AJ Gale et al., *The Burnout Phenomenon: A Comparative Study of Student Attitudes Toward Collaborative Learning and Sustainability*, Journal of Interior Design, Volume 39, Number 1, p. 18

R Soetanto et al., *Virtual Collaborative Learning for Building Design*, Proceedings of the ICE - Management, Procurement and Law, Volume 167 Issue 1, p. 26

U Athavankaret al., *Multidisciplinary Team Dynamics in Service Design - The Facilitating Role of Pattern Language*, Proceedings of the India HCI 2014 Conference on Human Computer Interaction, Delhi, December 7-9, 2014, p. 16

MS Uihlein, *Ove Arup's Total Design, Integrated Project Delivery, and the Role of the Engineer*, Architectural Science Review, October 28, 2014

A Sev and M Ezel, *Nanotechnology Innovations for the Sustainable Buildings of the Future*, International Journal of Civil, Architectural, Structural and Construction Engineering, Volume 8 Number 8, p. 851

CV Kumar, *Study on Nano materials and Application of Nanotechnology and Its Impacts in Construction*, International Journal of Modern Engineering Research, p. 6

H Yongping et al., *An Ontology-based Method for Process Modeling in Multi-Disciplinary Collaborative Design*, International Journal of Control and Automation, Volume 7 Number

8, p. 143

J Lee, *The Integrated Design Process from the Facilitator's Perspective*, International Journal of Art & Design Education, Volume 33 Issue 1

BB Das and A Mitra, *Nanomaterials for Construction Engineering-A Review*, International Journal of Materials, Mechanics and Manufacturing, Volume 2 Number 1, p. 44

S Hirsch, *In Harmony with Nature*, Anderson Herald Bulletin, October 12, 2014

2013

R Ruparathna and K Hewage, *Review of Contemporary Construction Procurement Practices*, Journal of Management in Engineering, Volume 10 Number 1061, p. 1943B.

A Daryoush and A Darvish, *A Case Study and Review of Nanotechnology and Nanomaterials in Green Architecture*, Research Journal of Environmental and Earth Sciences, Volume 5 Issue 2, 2013, p. 79

P de Leon et al., *A Flexible Automated Digital Design for Production Workflow*, Proceedings of the 18th International Conference on Computer-Aided Architectural Design Research in Asia, Singapore, May 14-17, 2013, p. 645

M Chiuni, W Grondzik, W. King, M. McGinley and J. Owens, *Architect and Engineer Collaboration: The Solar Decathlon As a Pedagogical Opportunity*, Proceedings of the Architectural Engineering Institute Conference, Pennsylvania State University, April 3-5, 2013, p. 218

J Macdonald and M Granroth, *Multidisciplinary AEC Education Utilising BIM/PLIM Tools and Processes*, Product Lifecycle Management for Society, Volume 409, p. 663

2012

T Hootman, *Net Zero Energy Design: A Guide for Commercial Architecture*, New York: John Wiley & Sons, 2012, p. 419

G Dittrich, *HI Design in Croatia – Event Review*, 4Hoteliers, June 15, 2012, http://www.4hoteliers.com/4hots_nshw.php?mwi=10085

D Markham, *New iPad Case is Plastic-Free, Made with Human Power*, Discovery.com, January 4, 2012, <http://dsc.discovery.com/gear-gadgets/new-ipad-case-is-plastic-free-made-with-human-power.html>

M Tabini, *The Week in iPad Cases: Proof of Life*, Macworld, January 14, 2012, http://www.macworld.com/article/164770/2012/01/ipad_case_roundup_35.html

J Heimbuch, *iPad Case Made with Human Power, is Plastic-Free*, Treehugger, January 5, 2012, <http://www.treehugger.com/gadgets/new-ipad-case-plastic-free-made-human-power.html>

2011 S Kim and E Shim, *A Case Study in Application of Green Building Strategies Using Building Information Modeling Into a Construction Education*, Proceedings of the 2011 Associated Schools of Construction Region III Conference, Downers Grove, Illinois, October 26-29, 2011, p. 21

B Halford, *Building Small: Nanotechnology Makes Inroads in the Construction Industry*, Chemical & Engineering News, June 13, 2011, Volume 89, Number 24, pp. 12-17, <http://pubs.acs.org/cen/coverstory/89/8924cover.html>

2010 L Volker and R Klein, *Architect Participation in Integrated Project Delivery: The Future Mainspring of Architectural Design Firms?* Design Management and Technology, Volume 5 Issue 3, November 2010, p. 40

L Zhang, A Issa and S Olbina, *Web-Based On-Demand Information Extraction Systems for Building Information Models*, Proceedings of the International Conference on Computing in Civil and Building Engineering, University of Nottingham, UK, June 30 - July 2, 2010, pp. 1-2

J Harty and R Liang, *The Management of Sharing, Integrating, Tracking, and Maintaining Data-Sets, is a New and Rather Complex Task*, Proceedings of the 14th International Conference on Information Visualisation, London, July 26-29, 2010

L Zhang and W Chen, *The Analysis of Liability Risk Allocation for Integrated Project Delivery*, Proceedings of the 2nd International Conference on Information Science and Engineering, Hangzhou, China, December 4-6, 2010

J Gola and C Robertson, *Material Change: George Elvin interviewed by Julianne Gola and Cameron Robertson*, Volume Magazine, Vol. 24, Columbia University, October 2010, <http://c-lab.columbia.edu/0170.html>

Molecular Design at the International Forum on Architecture and Construction, March 12, 2010, <http://blogportobello.com.br/2010/03/12/nanotecnologia-o-design-molecular-no-forum-internacional-de-arquitetura-e-construcao/>

J Moore, *Revestir 2010 Exceeds Expectations in a Challenging Economy*, National Floor

Trends, March 18, 2010,
http://www.ntlfloortrends.com/Articles/Industry_News/BNP_GUID_9-5-2006_A_10000000000000782264

2009

R Miller, D Strombom, M Iammarino and B Black, *The Commercial Real Estate Revolution: Nine Transforming Keys to Lowering Costs, Cutting Waste, and Driving Change in a Broken Industry*, New York: John Wiley & Sons, 2009, pp. 43, 299

W Grondzik, *Principles of Building Commissioning*, New York: John Wiley & Sons, 2009, pp. 2, 13, 55, 62

S Razavi and C Haas, *A Data Fusion Model for Location Estimation in Construction*, Proceedings of the 26th International Symposium on Automation and Robotics in Construction, Montreal, August 11-15, 2009, p. 430

K Dong and J Doerfler, *Collaborative Teaching to Create Integrated Building Envelopes*, 39th IEEE Frontiers in Education Conference, San Antonio, Texas, October 18-21, 2009

Z Yang and G Wang, *Cooperation Between Building Information Modeling and Integrated Project Delivery Method Leads to Paradigm Shift of AEC Industry*, Proceedings of the International Conference on Management and Service Science, Wuhan, China, September 20-22, 2009

S Au, *BIM/BLM for Owners*, Technical Report, Hong Kong: MTECH Engineering, 2009, p. 15

P Sanguinetti, *BIM in Academia: Shifting Our Attention From Product to Process*, CAAD Futures 2009: Joining Languages, Cultures and Visions, Montreal, June 17-19, 2009, p. 408

K Kimoto, Y Imai and Y Shikama, *A Methodology of Cost Management with Architectural 3D CAD Case Studies*, Proceedings of the 13th Pacific Association of Quantity Surveyors Congress, Kuala Lumpur, Malaysia, August 17-18, 2009, p. 111

A Walker, D Greenwood and E Johansen, *The Lack of Design Quality Focus in Construction: A Case for Examining Suitable Design Processes*, Proceedings of the 25th Annual Association of Researchers in Construction Management Conference, Nottingham, UK, September 7-9, 2009, p. 321

M L Lehman, *Nanotechnology: A Science Impacting Architectural Design*, Sensing Architecture, February 11, 2009, <http://sensingarchitecture.com/2009/02/11/nanotechnology-a-science-impacting-architectural-design/#comment-146>

M LaPointe, *Dr. George Elvin from Green Technology Forum to Feature SPD-Smart Technology in Series of Talks and Courses*, Research Frontiers, Aug. 19, http://www.refr-spd.com/press.asp?rec_id=100992&sec=Dr.%20George%20Elvin%20from%20Green%20Technology%20Forum%20to%20Feature%20SPD-Smart%20Technology%20in%20Series%20of%20Talks%20and%20Courses

2008 K Ku, S Pollalis, M Fischer and D Shelden, *3D Model-Based Collaboration in Design Development and Construction of Complex Shaped Buildings*, International Journal of Information Technology in Construction, Vol. 13 (2008), pp. 480, 482

D Gier, *What Impact Does Using Building Information Modeling Have on Teaching Estimating to Construction Management Students?* Proceedings of the Associated Schools of Construction Annual Conference, Auburn University, April 2-5, 2008, p. 2

T McCuen, *Building Information Modeling and the Interactive Capability Maturity Model*, Proceedings of the Associated Schools of Construction Annual Conference, Auburn University, April 2-5, 2008

Autodesk, *Building Industry Results Through Integrated Project Delivery and Building Information Modeling* 16161616161616161616, White Paper, 2008, <http://02e440f.netsolhost.com/images/BIM-REDUCED.pdf>, p. 15

T Altes, *Is Nano a No-No? Nanotechnology Advances into Buildings*, Environmental News Network, March 6, 2008, http://www.enn.com/green_building/commentary/32429

P Bonda, *Nano-what? How It Will Change Almost Everything*, Interior Design, January 22, 2008, <http://www.interiordesign.net/GreenZoneNews/CA6524503.html?subhead=Features>

2007 Video interview, Washington Post/Newsweek Interactive, *Meet Nanotech Architect George Elvin*, <http://www.sprig.com/videos/meet-george-elvin/>

R Fried, *Nanotech & Green Building*, Progressive Investor, Nov. 2007, Issue 49, http://www.sustainablebusiness.com/progressiveinvestor/Nov07_Issue49.htm#Story6

F Sedgemore, *Nanotech and Green Building Converge*, Nanomaterials News, Vol. Three Issue Sixteen, October 16, 2007, p. 6

Craig, Duane, *Nanotechnology Offers New Construction Materials*, Construction Informer, November 16, 2007, podcast, <http://blog.sunworldventures.com/>

New Study Finds Nanotechnology Can Make Green Buildings Even Greener, Eco-Realtor, November 3, 2007, <http://eco-realtor.blogspot.com/2007/11/in-green-news.html>

2006 Zheng, et al., *NUE: New Vision for Built Environment Integration of Nanotechnology into Civil Engineering Undergraduate Curriculum*, <http://rgeoghegan.1free.ws/>

R Jones, *A Round-up of Nano-blogs*, softmachines.org, July 7, <http://www.softmachines.org/wordpress/?p=241>

Meme Therapy, *Nanotechnology's Immediate Future*, August 17, <http://memetherapy.net/17/nanotechs-immediate-future/>

2005 J Ong, *Pioneering Research Unveiled at ARC-US*, AEC Daily, <http://www.aecdaily.com/en/1420963>

2004 Inside Illinois, *UI Professors to Appear in Documentary*, Vol. 23, No. 17, April 1, <http://www.news.uiuc.edu/11/04/0401/briefs.html>

2003 American Society of Civil Engineers, *Tablet and Wearable Computers for Integrated Design and Construction*, Civil Engineering Database, www.pubs.asce.org/WWWdisplay.cgi?0300925

Digital Television Professional, *Wearable Computers Would Save Money, Increase Efficiencies*, <http://www.dtvprofessional.com/articles/viewarticle.jsp?id=16101>