A Selected Bibliography of Publications by, and about, Graeme W. Milton

Graeme W. Milton
University of Utah
Department of Mathematics, 310 JWB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 6495
FAX: +1 801 581 4148

E-mail: milton@math.utah.edu
WWW URL: https://www.math.utah.edu/~milton/

19 September 2023
Version 2.09

Title word cross-reference

-1 [Mil92]. 2 [GMO09b, KMW12a, MN11, MN12, MBH16]. 3 [KMvHW19, MBH16]. 3×3 [HM15b, HM17b]. D [MCE17, MCE18]. G [MN99, MCE17, MCE18]. H [Tar89]. $\mathbf{R}^3$ [BM15, MB14]. N [PTM82a, PTM83]. Q_C^* [Mil16m]. R^3 [BM14].

-closure [MN99, MCE17, MCE18]. **-convex** [Mil16m]. **-dimensional** [MN11, MN12, MBH16]. **-measures** [Tar89]. **-phase** [MN11, MN12, PTM82a, PTM83]. **-printed** [MCE17, MCE18].

138 [FM87a].

2-dimensional [MBH17]. **2002** [MGDV03].

3 [MCE17, MCE18]. **3-dimensional** [MBH17].

[BPZ+16, BPZ+17]. **brief** [Mil90a]. **brine** [SMD86]. **brine-saturated** [SMD86]. **Broadband** [GMO09c, GMO09d, CM16c, CM17]. **Bubbly** [SM91]. **Bulk** [AM89b, ACG+96, GM93].

cable [BMMS19]. **Can** [MS02, BMMS19, Mil17d]. **Canonical** [Mil16d]. **cell** [SM99]. **certain** [MM98]. **Change** [BMN04, BM09b]. **channel** [BMMS19]. **characterization** [ACG+96, GMO09e, GMO11a, HM15b, HM17b, Mil88, Mil12c, Mil13d, MHB16, MHB17]. **characterizing** [Mil90b]. **checkerboards** [Mil01]. **Circuits** [MS08a, MS10a, MS09, MS10b]. **class** [Mil04a, SM99]. **classes** [CLM92]. **Classical** [Mil88]. **Classifying** [FM86, FM87a]. **climbing** [Ano16c, HMDB16b, HMDB16a]. **CLM** [Jas09]. **Cloak** [CCK+07a, CCK+07b]. **Cloaking** [GMO09a, GMO09c, MNBM09, MN06a, Mil07a, ACK+11, ACK+13c, ACK+13d, ACK+14, CM16c, CM17, GMO09b, GMO09d, GMO10, GMO11b, GMO11c, GMOS11, GMO12, MN06b, MBW06, MNM+08a, MNM+08b, MM18, NMMB07, GMOS13]. **close** [Mil92]. **closely** [MPM88]. **closure** [CEM05, MN99, MCE17, MCE18]. **Coated** [LM20, MS01, NMM93]. **coefficient** [BM09b]. **coherent** [Mil85a, Mil85b]. **collections** [Mil15b, Mil15d, Mil16l]. **Columnar** [BM10d]. **combat** [MNBM09]. **comparison** [MM82]. **compatible** [MC93]. **competition** [Mil18a]. **Complete** [GMO09e, GMO11a, Mil97b, Mil12c, Mil13d, ACG+96, GM98a, MHB16, MCE17, MHB17, MCE18]. **Complex** [KKL+14, EML02, GM93, GMB99, KKL+13, Mil80, Mil81a, MM95, MB97, Mil03, Mil04a, MT13, Mil15d, Mil17c, TM13, TM15]. **compliance** [GM98b, MCE17, MCE18]. **Component** [Mil18b, CWM16, Mil81a, Mil81b, Mil81c, Mil82, MPT82, Mil17b]. **Composite** [KM91a, Mil92, Mil04b, BM03, BM91, Jas09, MM90, Mil80, Mil81a, Mil81c, Mil81d, MSM17, MSM18, NMM93]. **Composites** [AM13a, BM97, BM09a, BM10d, Gra18, Mil97a, Mil97b, Mil02, Mil16e, Mil16g, Mil18b, NMMB06, Sha17, AM13b, AM89a, BM10a, BM10b, BM11a, BM88, Ber09, BM08, BM11b, BM11c, CWM16, CLM92, Che09, CM95, EM99, GLM93, GM98a, GMS00, Gra09, HMM97, HMM11a, HMM11b, KM14a, KM14b, KM86, MM15, MM16a, MMM82, Mil81b, Mil82, MM82, Mil84a, MG85, Mil86a, Mil87a, Mil87b, Mil88, MK88, Mil90a, Mil90b, MG90, MS00, MN11, MN12, Mil16a, Mil17b, Nes98, NMM94, PTM82b, PTM83, SM91, Smy09, VM04, VM05, VM08]. **composities** [Mil84b]. **computing** [EM99]. **Concerning** [Mil81d]. **conditions** [GMS00]. **conducting** [BIT13, BMT14, Che09, FM09, Gra09, MPM88, MS00, Mil16a]. **conduction** [FM87b, MG85, SM91]. **Conductivities** [AM13a, AM13b]. **Conductivity** [KKL+14, LM20, ACLM88, ACLM89, BMN04, CM94, FM94, KKL+13, KM86, MM82, Mil86b, Mil88, MG90, MS01, Mil01, MT13, Nes98, PTM82a, SK09, TM13, TM15]. **Conference** [MGDV03]. **configurations** [NM91]. **Conjecture** [ACK+09, KM08, ACK+10, Mil01, KM08]. **Conjectures** [Kan09, KM06a, KM06b, MK06]. **connections** [SK09]. **conservation** [MO17, MO19]. **consistent** [BM10a, BM10b]. **Constant**

vector [Mil20]. **velocity** [SM00]. **via** [MN99, Smy09]. **vis** [BM10a, BM10b]. **vis-à-vis** [BM10a, BM10b]. **Viscoelastic** [BM97, GLM93, Ber09, EML02, GM93, GMB99, MM15, MM16a, MB97, VM05]. **Volume** [KM13, KKM11, KMW12b, KM12, KKM12, KMW14, MN11, Mil11, MN12, Mil12a, MT13, TM13, TM14a, TM14b, TM15].

W [Ano16a, BCS09, Gra18, Sha17]. **wave** [MM17a, MM17b, Mil03]. **Wavelengths** [NMMB06]. **waves** [HCM16, HMC16, MW10a, MW10b, Smy09]. **weak** [MCE17, MCE18, KM08]. **webs** [BMMS19, Mil17d]. **Which** [BIT13, BMT14, MC95, Mil13b]. **while** [MCE17, MCE18]. **William** [BCS09]. **Winner** [BCS09]. **wire** [Mil17d]. **without** [CCK+07a, MM17c].

zero [MS11].

References

Avellaneda:1996:CCP

[ACG+96] M. Avellaneda, Andrej V. Cherkaev, Leonid V. Gibiansky, Graeme W. Milton, and M. Rudelson. A complete characterization of the possible bulk and shear moduli of planar polycrystals. *Journal of the Mechanics and Physics of Solids*, 44(7):1179–1218, July 1996. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/002250969600018X`.

Ammari:2009:PSE

[ACK+09] Habib Ammari, Yves Capdeboscq, Hyeonbae Kang, Hyundae Lee, Graeme W. Milton, and Habib Zribi. Progress on the strong Eshelby's conjecture and extremal structures for the elastic moment tensor. *arXiv.org*, ??(??):??, September 10, 2009. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/0909.1969`. Published in J. Math. Pures Appl. (9) 94(1):93–106, 2010.

Ammari:2010:PSE

[ACK+10] Habib Ammari, Yves Capdeboscq, Hyeonbae Kang, Hyundae Lee, Graeme W. Milton, and Habib Zribi. Progress on the strong Eshelby's conjecture and extremal structures for the elastic moment tensor. *Journal de Mathématiques Pures et Appliquées*, 94 (1):93–106, 2010. CODEN JMPAAM. ISSN 0021-7824 (print), 1776-3371 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0021782410000115`.

Ammari:2011:STN

[ACK+11] Habib Ammari, Giulio Ciraolo, Hyeonbae Kang, Hyundae Lee, and Graeme W. Milton. Spectral theory of a Neumann–Poincaré-type operator and analysis of cloaking due to anomalous localized resonance. *arXiv.org*, ??(??):??, September 2, 2011. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1109.0479`.

Ammari:2012:STN

[ACK+12] Habib Ammari, Giulio Ciraolo, Hyeonbae Kang, Hyundae Lee, and Graeme W. Milton. Spectral theory of a Neumann–Poincaré-type operator and analysis of anomalous localized resonance II. *arXiv.org*, ??(??):??, December 20, 2012. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1212.5066`.

Ammari:2013:ALRa

[ACK+13a] Habib Ammari, Giulio Ciraolo, Hyeonbae Kang, Hyundae Lee, and Graeme W. Milton. Anomalous localized resonance using a folded geometry in three dimensions. *arXiv.org*, ??(??):??, January 24, 2013. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1301.5712`.

Ammari:2013:ALRb

[ACK+13b] Habib Ammari, Giulio Ciraolo, Hyeonbae Kang, Hyundae Lee, and Graeme W. Milton. Anomalous localized resonance using a folded geometry in three dimensions. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 469(2154):20130048, June 8, 2013. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/469/2154/20130048`. Also available as arXiv:1301.5712 [math-ph].

Ammari:2013:STN

[ACK+13c] Habib Ammari, Giulio Ciraolo, Hyeonbae Kang, Hyundae Lee, and Graeme W. Milton. Spectral theory of a Neumann–Poincaré-type operator and analysis of cloaking due to anomalous localized resonance. *Archive for Rational Mechanics and Analysis*, 208(2):667–692, May 2013. CODEN AVRMAW. ISSN 0003-9527 (print), 1432-0673 (electronic). URL `http://link.springer.com/article/10.1007/s00205-012-0605-5`. See also arXiv:1109.0479 [math.AP].

Ammari:2013:STNII

[ACK+13d] Habib Ammari, Giulio Ciraolo, Hyeonbae Kang, Hyundae Lee, and Graeme W. Milton. Spectral theory of a Neumann–Poincaré-type operator and analysis of cloaking due to anomalous localized resonance II. *arXiv.org*, 2013. CODEN ???? ISSN 2331-8422. Submitted. Available as arXiv:1212.5066 [math.AP].

Ammari:2014:STN

[ACK+14] Habib Ammari, Giulio Ciraolo, Hyeonbae Kang, Hyundae Lee, and Graeme W. Milton. Spectral theory of a Neumann–Poincaré-type operator and analysis of cloaking by anomalous localized resonance II. In Plamen Stefanov, András Vasy, and Maciej Zworski, editors, *Inverse problems and applications: Conference in honor of Gunther Uhlmann on Inverse Problems, June 18–22, 2012, University of California, Irvine, CA: International Conference in honor of Gunther Uhlmann's 60th birthday on Inverse Problems and applications, September 17–21, 2012, Yuquan Campus, Zhejiang University, Hangzhou, China*, volume 615 of *Contemporary Mathematics*, pages 1–14. American Mathematical Society, Providence, RI, USA, 2014. ISBN 978-147-041-0-7-9-7 (print), 978-147-041-6-5-9-1 (online). LCCN QA378.5 .C665 2014.

Avellaneda:1988:ECP

[ACLM88] M. Avellaneda, Andrej V. Cherkaev, K. A. Lurie, and Graeme W. Milton. On the effective conductivity of polycrystals and a three-dimensional phase-interchange inequality. *Journal of Applied Physics*, 63(10):4989–5003, 1988. CODEN JAPIAU. ISSN 0021-8979 (print), 1089-7550 (electronic), 1520-8850. URL `http://scitation.aip.org/content/aip/journal/jap/63/10/10.1063/1.340445`.

Avellaneda:1989:CPP

[ACLM89] Marco Avellaneda, A. V. Cherkaev, K. A. Lurie, and Graeme Milton. On the conductivity of polycrystals and a phase-interchange inequality. *Physica A*, 157(1):148–153, May 1989. CODEN PHYADX. ISSN 0378-4371 (print), 1873-2119 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0378437189902914`.

Avellaneda:1989:BEE

[AM89a] M. Avellaneda and Graeme W. Milton. Bounds on the effective elasticity tensor of composites based on two point correlations.

In David Hui and Thomas J. Kozik, editors, *Composite material technology 1989: presented at the twelfth Annual Energy-Sources Technology Conference and Exhibition, Houston, Texas January 22–25, 1989*, volume PD-24 of *Petroleum Division*, pages 89–93. American Society of Mechanical Engineers, United Engineering Center, 345 E. 47th St., New York, NY 10017, USA, 1989. LCCN TA 418.9.C6 C56 1989.

Avellaneda:1989:OBE

[AM89b] Marco Avellaneda and Graeme W. Milton. Optimal bounds on the effective bulk modulus of polycrystals. *SIAM Journal on Applied Mathematics*, 49(3):824–837, June 1989. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/doi/pdf/10.1137/0149048`.

Alali:2013:ECTa

[AM13a] Bacim Alali and Graeme W. Milton. Effective conductivities of thin-interphase composites. *arXiv.org*, ????(??):??, February 12, 2013. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1302.2943`.

Alali:2013:ECTb

[AM13b] Bacim Alali and Graeme W. Milton. Effective conductivities of thin-interphase composites. *Journal of the Mechanics and Physics of Solids*, 61(12):2680–2691, 2013. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509613001750`.

Anonymous:2016:GWM

[Ano16a] Anonymous. Graeme W. Milton. Press release by the Scientific Committee of the International Research Center MEMOCS, May 25, 2016. URL `http://memocs.univaq.it/wp-content/uploads/2016/05/MiltonLaudatio.pdf`. Announcement of the award of the 2015 International Tullio Levi-Cività Prize.

Anonymous:2016:NMT

[Ano16b] Anonymous. New math tools for new materials. Press releases., November 21, 2016. URL `https://www.eurekalert.org/pub_releases/2016-11/uou-nmt112116.php`.

Anonymous:2016:TCR

[Ano16c] Anonymous. Theoretical climbing rope could brake falls: Now mathematicians need material to make it a reality. Univer-

sity of Utah Web site., July 6, 2016. URL `unews.utah.edu/theoretical-climbing-rope-could-brake-falls/Boyee`. Describes work published in [HMDB16a].

Berryman:2009:ISI

[BCS09] James G. Berryman, Elena Cherkaev, and Igor Sevostianov. Introduction to the special issue in honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science. *Mechanics of Materials: An International Journal*, 41 (4):355, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S016766360800166X`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Berryman:1998:TIP

[Ber98] James G. Berryman. Transversely isotropic poroelasticity arising from thin isotropic layers. In Kenneth M. Golden, G. R. Grimmett, R. D. James, Graeme W. Milton, and P. N. Sen, editors, *Mathematics of Multiscale Materials*, volume 99 of *IMA Volumes in Mathematics and its Applications*, pages 37–50. Springer-Verlag, Berlin / Heidelberg / London / etc., 1998. ISBN 0-387-98528-X. LCCN TA405 .M395 1998. URL `http://link.springer.com/chapter/10.1007/978-1-4612-1728-2_3`.

Berryman:2009:FDT

[Ber09] James G. Berryman. Frequency dependent thermal expansion in binary viscoelastic composites. *Mechanics of Materials: An International Journal*, 41(4):463–480, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000106`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Briane:2013:WEF

[BIT13] Marc Briane, Graeme W. Milton (IRMAR, INSA Rennes), and Andrejs Treibergs. Which electric fields are realizable in conducting materials? *arXiv.org*, ??(??):??, January 8, 2013. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1301.1613`.

Buckmann:2012:RTD

[BKM+12] Tiemo Bückmann, Muamer Kadic, Graeme W. Milton, Michael Thiel, and Martin Wegener. Realizability of three-dimensional dilational materials. *????*, ??(??):??, 2012. In preparation.

Berryman:1985:NCV

[BM85] James G. Berryman and Graeme W. Milton. Normalization constraint for variational bounds on fluid permeability. *Journal of Chemical Physics*, 83(2):754–760, July 15, 1985. CODEN JCPSA6. ISSN 0021-9606 (print), 1089-7690 (electronic). URL `http://scitation.aip.org/content/aip/journal/jcp/83/2/10.1063/1.449489`.

Berryman:1988:MRC

[BM88] James G. Berryman and Graeme W. Milton. Microgeometry of random composites and porous media. *Journal of Physics D: Applied Physics*, 21(1):87–94, 1988. CODEN JPAPBE. ISSN 0022-3727 (print), 1361-6463 (electronic). URL `http://iopscience.iop.org/0022-3727/21/1/013`.

Berryman:1991:ERG

[BM91] James G. Berryman and Graeme W. Milton. Exact results for generalized Gassman's equations in composite porous media with two constituents. *Geophysics*, 56(12):1950–1960, December 1991. CODEN GPYSA7. ISSN 0016-8033 (print), 1942-2156 (electronic). URL `http://library.seg.org/doi/abs/10.1190/1.1443006`.

Berryman:1992:ERL

[BM92] J. G. Berryman and Graeme W. Milton. Exact results in linear thermomechanics of fluid saturated porous media. *Applied Physics Letters*, 61(17):2030–??, October 26, 1992. CODEN APPLAB. ISSN 0003-6951 (print), 1077-3118 (electronic), 1520-8842. URL `http://scitation.aip.org/content/aip/journal/apl/61/17/10.1063/1.108349`.

Berryman:1997:VBE

[BM97] J. G. Berryman and Graeme W. Milton. Variational bounds and effective medium theories for viscoelastic composites. *APS March Meeting Abstracts*, ??(??):??, ???? 1997. URL `http://adsabs.harvard.edu/abs/1997APS..MAR.B1510B`.

Benveniste:2003:NER

[BM03] Y. Benveniste and Graeme W. Milton. New exact results for the effective electric, elastic, piezoelectric and other properties of composite ellipsoid assemblages. *Journal of the Mechanics and Physics of Solids*, 51(10):1773–1813, October 2003. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509603000747`.

Briane:2008:GHE

[BM08] Marc Briane and Graeme W. Milton. Giant Hall effect in composites. *Multiscale Modeling & Simulation*, 7(3):1405–1427, 2008. CODEN MMSUBT. ISSN 1540-3459 (print), 1540-3467 (electronic). URL `http://epubs.siam.org/doi/abs/10.1137/08073189X`.

Briane:2009:GHE

[BM09a] Marc Briane and Graeme W. Milton. Giant Hall effect in composites. *Multiscale Modeling & Simulation*, 7(3):1405–1427, ???? 2009. CODEN MMSUBT. ISSN 1540-3459 (print), 1540-3467 (electronic).

Briane:2009:HTD

[BM09b] Marc Briane and Graeme W. Milton. Homogenization of the three-dimensional Hall effect and change of sign of the Hall coefficient. *Archive for Rational Mechanics and Analysis*, 193(3): 715–736, September 2009. CODEN AVRMAW. ISSN 0003-9527 (print), 1432-0673 (electronic). URL `http://link.springer.com/article/10.1007/s00205-008-0200-y`.

Benveniste:2010:EMAa

[BM10a] Y. Benveniste and Graeme W. Milton. The effective medium and the average field approximations vis-à-vis the Hashin–Shtrikman bounds. I. The self-consistent scheme in matrix-based composites. *Journal of the Mechanics and Physics of Solids*, 58(7):1026–1038, July 2010. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509610000839`.

Benveniste:2010:EMAb

[BM10b] Y. Benveniste and Graeme W. Milton. The effective medium and the average field approximations vis-à-vis the Hashin–Shtrikman bounds. II. The generalized self-consistent scheme in matrix-based

composites. *Journal of the Mechanics and Physics of Solids*, 58(7): 1039–1056, July 2010. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509610000827`.

Briane:2010:AEH

[BM10c] Marc Briane and Graeme W. Milton. An antisymmetric effective Hall matrix. *SIAM Journal on Applied Mathematics*, 70(6):1810–1820, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/doi/abs/10.1137/09075901X`.

Briane:2010:NBS

[BM10d] Marc Briane and Graeme W. Milton. New bounds on strong field magneto-transport in multiphase columnar composites. *SIAM Journal on Applied Mathematics*, 70(8):3272–3286, ???? 2010. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/doi/abs/10.1137/100798090`.

Benveniste:2011:EMT

[BM11a] Y. Benveniste and Graeme W. Milton. An effective medium theory for multi-phase matrix-based dielectric composites with randomly oriented ellipsoidal inclusions. *International journal of engineering science*, 49(1):2–16, January 2011. CODEN IJESAN. ISSN 0020-7225 (print), 1879-2197 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0020722510001266`.

Briane:2011:BSFa

[BM11b] Marc Briane and Graeme W. Milton. Bounds on strong field magneto-transport in three-dimensional composites. *arXiv.org*, ?? (??):??, May 2011. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1105.3858`.

Briane:2011:BSFb

[BM11c] Marc Briane and Graeme W. Milton. Bounds on strong field magneto-transport in three-dimensional composites. *Journal of Mathematical Physics*, 52(10):103705:1–103705:118, October 2011. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://jmp.aip.org/resource/1/jmapaq/v52/i10/p103705_s1`.

Briane:2014:IRC

[BM14] Marc Briane and Graeme W. Milton. Isotropic realizability of current fields in R^3. *arXiv.org*, ??(??):??, September 26, 2014. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1409.7658`.

Briane:2015:IRC

[BM15] M. Briane and Graeme W. Milton. Isotropic realizability of current fields in $\mathbf{R}^3$. *SIAM Journal on Applied Dynamical Systems*, 14(2):1165–1188, ???? 2015. CODEN SJADAY. ISSN 1536-0040.

Briane:2008:HTD

[BMM08] M. Briane, D. Manceau, and Graeme W. Milton. Homogenization of the two-dimensional Hall effect. *Journal of Mathematical Analysis and Applications*, 339(2):1468–1484, March 15, 2008. CODEN JMANAK. ISSN 0022-247x (print), 1096-0813 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022247X07009055`.

Bouchitte:2019:FCW

[BMMS19] Guy Bouchitté, Ornella Mattei, Graeme W. Milton, and Pierre Seppecher. On the forces that cable webs under tension can support and how to design cable webs to channel stresses. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 475(2223):20180781, March 6, 2019. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic).

Briane:2004:CSC

[BMN04] Marc Briane, Graeme W. Milton, and Vincenzo Nesi. Change of sign of the corrector's determinant for homogenization in three-dimensional conductivity. *Archive for Rational Mechanics and Analysis*, 173(1):133–150, 2004. CODEN AVRMAW. ISSN 0003-9527 (print), 1432-0673 (electronic). URL `http://link.springer.com/article/10.1007/s00205-004-0315-8`.

Briane:2014:WEF

[BMT14] Marc Briane, Graeme W. Milton, and Andrejs Treibergs. Which electric fields are realizable in conducting materials? *Mathematical Modelling and Numerical Analysis = Modelisation mathématique et analyse numérique: M^2AN*, 48(2):307–323, March/April 2014. CODEN RMMAEV. ISSN 0764-583X (print), 1290-3841 (electronic). URL `http://journals.cambridge.org/abstract_S0764583X1300109X`.

Bardsley:2016:CGB

[BPZ+16] Patrick Bardsley, Michael S. Primrose, Michael Zhao, Jonathan Boyle, Nathan Briggs, Zoe Koch, and Graeme W. Milton. Criteria for guaranteed breakdown in two-phase inhomogeneous bodies. *arXiv.org*, ??(??):??, April 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1604.04881`.

Bardsley:2017:CGB

[BPZ+17] Patrick Bardsley, Michael S. Primrose, Michael Zhao, Jonathan Boyle, Nathan Briggs, Zoe Koch, and Graeme W. Milton. Criteria for guaranteed breakdown in two-phase inhomogeneous bodies. *Inverse Problems*, 33(8):085006, August 2017. CODEN INPEEY. ISSN 0266-5611 (print), 1361-6420 (electronic).

Buckmann:2014:TDD

[BST+14] Tiemo Bückmann, Robert Schittny, Michael Thiel, Muamer Kadic, Graeme W. Milton, and Martin Wegener. On three-dimensional dilational elastic metamaterials. *New Journal of Physics*, 16(3):033032, March 2014. CODEN NJOPFM. ISSN 1367-2630. URL `http://stacks.iop.org/1367-2630/16/i=3/a=033032`.

Buckmann:2015:TDD

[BST+15] Tiemo Bückmann, Robert Schittny, Michael Thiel, Muamer Kadic, Graeme W. Milton, and Martin Wegener. On three-dimensional dilational elastic metamaterials. *arXiv.org*, ??(??):??, October 11, 2015. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1310.3719`.

Cai:2007:NMC

[CCK+07a] Wenshan Cai, Uday K. Chettiar, Alexander V. Kildishev, Graeme W. Milton, and Vladimir M. Shalaev. Non-magnetic cloak without reflection. *arXiv.org*, ??(??):??, July 24, 2007. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/0707.3641`.

Cai:2007:NCM

[CCK+07b] Wenshan Cai, Uday K. Chettiar, Alexander V. Kildishev, Vladimir M. Shalaev, and Graeme W. Milton. Nonmagnetic cloak with minimized scattering. *Applied Physics Letters*, 91 (11):111105, September 10, 2007. CODEN APPLAB. ISSN

0003-6951 (print), 1077-3118 (electronic), 1520-8842. URL `http://scitation.aip.org/content/aip/journal/apl/91/11/10.1063/1.2783266`.

Camar-Eddine:2005:NLI

[CEM05] M. Camar-Eddine and Graeme W. Milton. Non-local interactions in the homogenization closure of thermoelectric functionals. *Asymptotic Analysis*, 41(3–4):259–276, 2005. CODEN ASANEZ. ISSN 0921-7134 (print), 1875-8576 (electronic). URL `http://content.iospress.com/articles/asymptotic-analysis/asy667`.

Cherkaev:2009:BEP

[Che09] Andrej V. Cherkaev. Bounds for effective properties of multimaterial two-dimensional conducting composites. *Mechanics of Materials: An International Journal*, 41(4):411–433, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000052`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Cherkaev:1992:IPS

[CLM92] Andrei V. Cherkaev, Konstantin A. Lurie, and Graeme W. Milton. Invariant properties of the stress in plane elasticity and equivalence classes of composites. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 438(1904):519–529, September 8, 1992. CODEN PRLAAZ. ISSN 0080-4630. URL `http://rspa.royalsocietypublishing.org/content/438/1904/519`.

Clark:1994:MEC

[CM94] Karen E. Clark and Graeme W. Milton. Modeling the effective conductivity function of an arbitrary two-dimensional polycrystal using sequential laminates. *Proceedings of the Royal Society of Edinburgh. Section A, Mathematical and Physical Sciences*, 124 (4):757–783, 1994. CODEN PEAMDU. ISSN 0308-2105 (print), 1473-7124 (electronic).

Clark:1995:OBC

[CM95] Karen E. Clark and Graeme W. Milton. Optimal bounds correlating electric, magnetic and thermal properties of two-phase, two-dimensional composites. *Proceedings of the Royal Society*

of London. Series A, Mathematical and physical sciences, 448 (1933):161–190, February 8, 1995. CODEN PRLAAZ. ISSN 0080-4630. URL `http://rspa.royalsocietypublishing.org/content/448/1933/161`.

Cassier:2016:ADN

[CM16a] Aaron Welters Maxence Cassier and Graeme W. Milton. Analyticity of the Dirichlet-to-Neumann map for the time-harmonic Maxwell's equations. In Milton [Mil16g], chapter 4, pages 95–122. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Cassier:2016:RAFb

[CM16b] Aaron Welters Maxence Cassier and Graeme W. Milton. A rigorous approach to the field recursion method. In Milton [Mil16g], chapter 10, pages 287–308. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Cassier:2016:BHF

[CM16c] Maxence Cassier and Graeme W. Milton. Bounds on Herglotz functions and fundamental limits of broadband passive quasistatic cloaking. *arXiv.org*, ??(??):??, October 27, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1610.08592`.

Cassier:2017:BHF

[CM17] Maxence Cassier and Graeme W. Milton. Bounds on Herglotz functions and fundamental limits of broadband passive quasistatic cloaking. *Journal of Mathematical Physics*, 58(7):071504, July 2017. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427.

Cassier:2015:ADN

[CWM15] Maxence Cassier, Aaron Welters, and Graeme W. Milton. Analyticity of the Dirichlet-to-Neumann map for the time-harmonic Maxwell's equations. *arXiv.org*, ??(??):??, December 15, 2015. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1512.05838`. This is a copy of chapter 4 in the book *Extending the Theory of Composites to Other Areas of Science* edited by Graeme W. Milton, 2016, Milton-Patton Publishers, ISBN-13 978-1-4835-6919-2.

Cassier:2016:RAFa

[CWM16] Maxence Cassier, Aaron Welters, and Graeme W. Milton. A rigorous approach to the field recursion method for two-component composites with isotropic phases. *arXiv.org*, ??(??):??, January 7, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1601.01378`. This is a copy of chapter 10 in the book *Extending the Theory of Composites to Other Areas of Science* edited by Graeme W. Milton, 2016, Milton-Patton Publishers, ISBN-13 978-1-4835-6919-2.

Eyre:1999:FNS

[EM99] David J. Eyre and Graeme W. Milton. A fast numerical scheme for computing the response of composites using grid refinement. *European Physical Journal. Applied Physics*, 6(1):41–47, April 1999. CODEN EPAPFV. ISSN 1286-0042 (print), 1286-0050 (electronic). URL `http://www.epjap.org/articles/epjap/abs/1999/04/ap8234/ap8234.html`.

Eyre:2002:BIC

[EML02] David J. Eyre, Graeme W. Milton, and Roderic S. Lakes. Bounds for interpolating complex effective moduli of viscoelastic materials from measured data. *Rheologica Acta*, 41(5):461–470, 2002. CODEN RHEAAK. ISSN 0035-4511 (print), 1435-1528 (electronic). URL `http://link.springer.com/article/10.1007/s003970100172`.

Fisher:1986:CFO

[FM86] Michael E. Fisher and Graeme W. Milton. Classifying first-order phase transitions. *Physica A*, 138(1–2):22–54, September 1986. CODEN PHYSAG. ISSN 0378-4371 (print), 1873-2119 (electronic). URL `http://www.sciencedirect.com/science/article/pii/037843718690172X`.

Fisher:1987:ECF

[FM87a] Michael E. Fisher and Graeme W. Milton. Erratum: "Classifying first-order phase transitions" [Phys. A **138** (1986), no. 1, 22–54; MR0865235 (87k:82052)]. *Physica A*, 142(1-3):649, 1987. CODEN PHYSAG. ISSN 0378-4371 (print), 1873-2119 (electronic).

Francfort:1987:OBC

[FM87b] G. A. Francfort and Graeme W. Milton. Optimal bounds for conduction in two-dimensional, multiphase, polycrystalline media. *Journal of Statistical Physics*, 46(1–2):161–177, January

1987. CODEN JSTPSB. ISSN 0022-4715 (print), 1572-9613 (electronic). URL `http://link.springer.com/article/10.1007/BF01010338`.

Francfort:1994:SCE

[FM94] Gilles A. Francfort and Graeme W. Milton. Sets of conductivity and elasticity tensors stable under lamination. *Communications on Pure and Applied Mathematics (New York)*, 47(3): 257–279, 1994. CODEN CPAMAT, CPMAMV. ISSN 0010-3640 (print), 1097-0312 (electronic). URL `http://onlinelibrary.wiley.com/doi/10.1002/cpa.3160470302/full`.

Francfort:2009:POB

[FM09] Gilles A. Francfort and François Murat. The proofs of the optimal bounds for mixtures of two anisotropic conducting materials in two dimensions. *Mechanics of Materials: An International Journal*, 41(4):448–455, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000039`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Gibiansky:1993:VCE

[GLM93] Leonid V. Gibiansky, Roderic S. Lakes, and Graeme W. Milton. Viscoelastic composites with extremal properties. In J. Herskovits, editor, *Structural Optimization 93 (Proceedings of The 1993 World Congress on Optimal Design of Structural Systems)*, volume 1 of *The World Congress on Optimal Design of Structural Systems Proceedings*, pages 369–376. Federal university of Rio de Janeiro, Rio de Janeiro, Brazil, 1993. LCCN TA658.8 S928 1993.

Gibiansky:1993:EVM

[GM93] Leonid V. Gibiansky and Graeme W. Milton. On the effective viscoelastic moduli of two-phase media. I. Rigorous bounds on the complex bulk modulus. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 440(1908): 163–188, January 8, 1993. CODEN PRLAAZ. ISSN 0080-4630.

Grabovsky:1998:ERC

[GM98a] Yury Grabovsky and Graeme W. Milton. Exact relations for composites: towards a complete solution. *Documenta Mathematica*,

Extra Volume ICM III(Extra Vol. III):623–632, 1998. ISSN 1431-0635. URL `http://www.math.uiuc.edu/documenta/xvol-icm/16/Milton.MAN.ps.gz`.

Grabovsky:1998:ROP

[GM98b] Yury Grabovsky and Graeme W. Milton. Rank one plus a null-Lagrangian is an inherited property of two-dimensional compliance tensors under homogenisation. *Proceedings of the Royal Society of Edinburgh. Section A, Mathematical and Physical Sciences*, 128(2):283–299, 1998. CODEN PEAMDU. ISSN 0308-2105 (print), 1473-7124 (electronic). URL `http://journals.cambridge.org/production/action/cjoGetFulltext?fulltextid=8240207`.

Gibiansky:1999:EVM

[GMB99] Leonid V. Gibiansky, Graeme W. Milton, and James G. Berryman. On the effective viscoelastic moduli of two-phase media: III. Rigorous bounds on the complex shear modulus in two dimensions. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 455(1986):2117–2149, June 8, 1999. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic).

GuevaraVasquez:2009:AECa

[GMO09a] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Active exterior cloaking. *arXiv.org*, ??(??):??, June 8, 2009. CODEN ???? ISSN 2331-8422. URL `http://adsabs.harvard.edu/abs/2009arXiv0906.1544G; https://arxiv.org/abs/0906.1544`. Published in Physical Review Letters, 103, 073901 (2009).

GuevaraVasquez:2009:AECb

[GMO09b] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Active exterior cloaking for the 2D Laplace and Helmholtz equations. *Physical Review Letters*, 103(7):073901, August 14, 2009. CODEN PRLTAO. ISSN 0031-9007 (print), 1079-7114 (electronic), 1092-0145. URL `http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.103.073901`.

GuevaraVasquez:2009:BECa

[GMO09c] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Broadband exterior cloaking. *arXiv.org*, ??(??):??, July 1, 2009. CODEN ???? ISSN 2331-8422. URL `https://arxiv.`

org/abs/0907.0263. Published in Optics Express, Vol. 17, pp. 14800-14805 (2009).

GuevaraVasquez:2009:BECb

[GMO09d] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Broadband exterior cloaking. *Optics Express*, 17(17): 14800–14805, August 17, 2009. CODEN OPEXFF. ISSN 1094-4087. URL https://www.osapublishing.org/oe/abstract.cfm?uri=oe-17-17-14800.

GuevaraVasquez:2009:CCS

[GMO09e] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Complete characterization and synthesis of the response function of elastodynamic networks. *arXiv.org*, ??(??):??, November 8, 2009. CODEN ???? ISSN 2331-8422. URL https://arxiv.org/abs/0911.1501. Published in Journal of Elasticity, 102, no. 1 (2011), 31–54, 2011.

GuevaraVasquez:2010:ECA

[GMO10] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Exterior cloaking with active sources in two dimensional acoustics. *arXiv.org*, ??(??):??, September 10, 2010. CODEN ???? ISSN 2331-8422. URL https://arxiv.org/abs/1009.2038. Published in Wave Motion, 48, no. 6 (2011), 515–524.

GuevaraVasquez:2011:CCS

[GMO11a] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Complete characterization and synthesis of the response function of elastodynamic networks. *Journal of Elasticity*, 102 (1):31–54, January 2011. CODEN JELSAY. ISSN 0374-3535 (print), 1573-2681 (electronic). URL http://link.springer.com/article/10.1007/s10659-010-9260-y.

GuevaraVasquez:2011:ECA

[GMO11b] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Exterior cloaking with active sources in two dimensional acoustics. *Wave Motion*, 48(6):515–524, 2011. CODEN WAMOD9. ISSN 0165-2125 (print), 1878-433X (electronic). URL http://www.sciencedirect.com/science/article/pii/S0165212511000382.

GuevaraVasquez:2011:MAT

[GMO11c] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Mathematical analysis of the two dimensional active

exterior cloaking in the quasistatic regime. *arXiv.org*, ??(??): ??, September 16, 2011. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1109.3526`. Published in Analysis and Mathematical Physics, 2 (2012), no. 3, pp 231-246.

GuevaraVasquez:2012:MAT

[GMO12] Fernando Guevara Vasquez, Graeme W. Milton, and Daniel Onofrei. Mathematical analysis of the two dimensional active exterior cloaking in the quasistatic regime. *Analysis and Mathematical Physics*, 2(3):231–246, 2012. CODEN ???? ISSN 1664-235X (print), 1664-2368 (electronic). URL `http://link.springer.com/article/10.1007/s13324-012-0031-8`.

GuevaraVasquez:2011:TEA

[GMOS11] Fernando Guevara Vasquez, Graeme W. Milton, Daniel Onofrei, and Pierre Seppecher. Transformation elastodynamics and active exterior acoustic cloaking. *arXiv.org*, ??(??):??, May 6, 2011. CODEN ???? ISSN 2331-8422. URL `http://adsabs.harvard.edu/abs/2011arXiv1105.1221G; https://arxiv.org/abs/1105.1221`. Submitted as a chapter for the volume *Acoustic metamaterials: Negative refraction, imaging, lensing and cloaking*, Craster and Guenneau ed., Springer.

Vasquez:2013:SRP

[GMOS13] Fernando Guevara Vasquez, Graeme W. Milton, Daniel Onofrei, and Pierre Seppecher. Transformation elastodynamics and active exterior acoustic cloaking. In Richard V. Craster and Sébastien Guenneau, editors, *Acoustic Metamaterials: Negative Refraction, Imaging, Lensing and Cloaking*, volume 166 of *Springer Series in Materials Science*, pages 289–318. Springer-Verlag, Berlin / Heidelberg / London / etc., 2013. ISBN 94-007-4813-2. LCCN ???? URL `http://link.springer.com/chapter/10.1007/978-94-007-4813-2_12`.

Grabovsky:2000:ERE

[GMS00] Yury Grabovsky, Graeme W. Milton, and Daniel S. Sage. Exact relations for effective tensors of composites: Necessary conditions and sufficient conditions. *Communications on Pure and Applied Mathematics (New York)*, 53(3):300–353, March 2000. CODEN CPAMAT, CPMAMV. ISSN 0010-3640 (print), 1097-0312 (electronic). URL `https://math.cst.temple.edu/~yury/exact.pdf`.

Grabovsky:2009:AGT

[Gra09] Yury Grabovsky. An application of the general theory of exact relations to fiber-reinforced conducting composites with Hall effect. *Mechanics of Materials: An International Journal*, 41(4): 456–462, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000064`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Grabovsky:2018:BRE

[Gra18] Yury Grabovsky. Book review: *Extending the Theory of Composites to Other Areas of Science*, edited and authored by Graeme W. Milton. *SIAM Review*, 60(2):475–481, ???? 2018. CODEN SIREAD. ISSN 0036-1445 (print), 1095-7200 (electronic).

Harutyunyan:2016:HFHa

[HCM16] Davit Harutyunyan, Richard V. Craster, and Graeme W. Milton. High frequency homogenization for travelling waves in periodic media. *arXiv.org*, ??(??):??, February 11, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1602.03603`.

Harutyunyan:2014:EEE

[HM14a] Davit Harutyunyan and Graeme Walter Milton. Explicit examples of extremal quasiconvex quadratic forms that are not polyconvex. *arXiv.org*, ??(??):??, March 14, 2014. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1403.3718`.

Harutyunyan:2014:RBE

[HM14b] Davit Harutyunyan and Graeme Walter Milton. On the relation between extremal elasticity tensors with orthotropic symmetry and extremal polynomials. *arXiv.org*, ??(??):??, November 16, 2014. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1411.4216`.

Harutyunyan:2015:RBE

[HM15a] Davit Harutyunyan and Graeme W. Milton. On the relation between extremal elasticity tensors with orthotropic symmetry and extremal polynomials. *arXiv.org*, 2015. ISSN 2331-8422. URL `https://arxiv.org/abs/1411.4216`.

Harutyunyan:2015:TCA

[HM15b] Davit Harutyunyan and Graeme W. Milton. Towards characterization of all 3×3 extremal quasiconvex quadratic forms. *arXiv.org*, ??(??):??, December 14,, 2015. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1512.04174`.

Harutyunyan:2015:EEE

[HM15c] Davit Harutyunyan and Graeme Walter Milton. Explicit examples of extremal quasiconvex quadratic forms that are not polyconvex. *Calculus of Variations and Partial Differential Equations*, 54 (2):1575–1589, October 2015. ISSN 0944-2669 (print), 1432-0835 (electronic). See also arXiv:1403.3718 [math.AP].

Harutyunyan:2017:RBE

[HM17a] Davit Harutyunyan and Graeme Walter Milton. On the relation between extremal elasticity tensors with orthotropic symmetry and extremal polynomials. *Archive for Rational Mechanics and Analysis*, 223(1):199–212, January 2017. CODEN AVRMAW. ISSN 0003-9527 (print), 1432-0673 (electronic).

Harutyunyan:2017:TCA

[HM17b] Davit Harutyunyan and Graeme Walter Milton. Towards characterization of all 3×3 extremal quasiconvex quadratic forms. *Communications on Pure and Applied Mathematics (New York)*, 70 (11):2164–2190, November 2017. CODEN CPAMAT, CPMAMV. ISSN 0010-3640 (print), 1097-0312 (electronic).

Harutyunyan:2016:HFHb

[HMC16] Davit Harutyunyan, Graeme W. Milton, and Richard V. Craster. High-frequency homogenization for travelling waves in periodic media. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 472(2191):20160066, July 2016. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic).

Harutyunyan:2016:IDCb

[HMDB16a] David Harutyunyan, Graeme W. Milton, Trevor J. Dick, and Justin Boyer. On ideal dynamic climbing ropes. *Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology*, 230(2):??, June 2016. CODEN ???? ISSN 1754-3371 (print), 1754-338X (electronic). URL `http://pip.sagepub.com/content/early/2016/06/16/1754337116653539.abstract`.

Harutyunyan:2016:IDCa

[HMDB16b] Davit Harutyunyan, Graeme W. Milton, Trevor J. Dick, and Justin Boyer. On ideal dynamic climbing ropes. *arXiv.org*, ?? (??):??, November 14, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1611.04327`.

Helsing:1997:DRC

[HMM97] Johan Helsing, Graeme W. Milton, and A. B. Movchan. Duality relations, correspondences and numerical results for planar elastic composites. *Journal of the Mechanics and Physics of Solids*, 45 (4):565–590, 1997. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S002250969600083X`.

Helsing:2011:SSRa

[HMM11a] Johan Helsing, Ross C. McPhedran, and Graeme W. Milton. Spectral super-resolution in metamaterial composites. *arXiv.org*, ?? (??):??, May 25, 2011. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1105.5012`.

Helsing:2011:SSRb

[HMM11b] Johan Helsing, Ross C. McPhedran, and Graeme W. Milton. Spectral super-resolution in metamaterial composites. *New Journal of Physics*, 13(11):115005, 2011. CODEN NJOPFM. ISSN 1367-2630. URL `http://iopscience.iop.org/1367-2630/13/11/115005`.

Jasiuk:2009:SIE

[Jas09] Iwona Jasiuk. Stress invariance and exact relations in the mechanics of composite materials: Extensions of the CLM result: a review. *Mechanics of Materials: An International Journal*, 41(4): 394–404, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S016766360900009X`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Kang:2009:CPS

[Kan09] Hyeonbae Kang. Conjectures of Pólya–Szegő and Eshelby, and the Newtonian potential problem: A review. *Mechanics of Materials: An International Journal*, 41(4):405–410, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S0167663609000131. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Kang:2013:BSI

[KKL+13] Hyeonbae Kang, Kyoungsun Kim, Hyundae Lee, Xiaofei Li, and Graeme W. Milton. Bounds on the size of an inclusion using the translation method for two-dimensional complex conductivity. *arXiv.org*, ??(??):??, October 9, 2013. CODEN ???? ISSN 2331-8422. URL https://arxiv.org/abs/1310.2439.

Kang:2014:BSI

[KKL+14] Hyeonbae Kang, Kyoungsun Kim, Hyundae Lee, Xiaofei Li, and Graeme W. Milton. Bounds on the size of an inclusion using the translation method for two-dimensional complex conductivity. *SIAM Journal on Applied Mathematics*, 74(4):939–958, ???? 2014. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/doi/abs/10.1137/130940426.

Kang:2008:IPS

[KKM08] Hyeonbae Kang, Eunjoo Kim, and Graeme W. Milton. Inclusion pairs satisfying Eshelby's uniformity property. *SIAM Journal on Applied Mathematics*, 69(2):577–595, ???? 2008. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL http://epubs.siam.org/doi/abs/10.1137/070691358.

Kang:2011:SBV

[KKM11] Hyeonbae Kang, Eunjoo Kim, and Graeme W. Milton. Sharp bounds on the volume fractions of two materials in a two-dimensional body from electrical boundary measurements: the translation method. *arXiv.org*, ??(??):??, May 4, 2011. CODEN ???? ISSN 2331-8422. URL https://arxiv.org/abs/1105.0949.

Kang:2012:SBV

[KKM12] Hyeonbae Kang, Eunjoo Kim, and Graeme W. Milton. Sharp bounds on the volume fractions of two materials in a two-dimensional body from electrical boundary measurements: the translation method. *Calculus of Variations and Partial Differential Equations*, 45(3–4):367–401, November 2012. ISSN 0944-2669 (print), 1432-0835 (electronic). URL http://link.springer.com/article/10.1007/s00526-011-0462-3.

Kohn:1986:BEC

[KM86] Robert V. Kohn and Graeme W. Milton. On bounding the effective conductivity of anisotropic composites. In J. L. Ericksen, David Kinderlehrer, Robert V. Kohn, and Jacques-Louis Lions, editors, *Homogenization and Effective Moduli of Materials and Media: Papers presented at a Workshop on Homogenization of Differential Equations and the Determination of Effective Moduli of Materials and Media, Primarily in the Context of Continuum Theory; Minneapolis, MN, October 22–October 26, 1984*, volume 1 of *The IMA Volumes in Mathematics and its Applications*, pages 97–125. Springer-Verlag, Berlin / Heidelberg / London / etc., 1986. ISBN 0-387-96306-5. LCCN QA808.2 .H661 1986. URL `http://link.springer.com/chapter/10.1007/978-1-4613-8646-9_5`.

Milton:1991:EMC

[KM91a] Robert V. Kohn and Graeme W. Milton. Extremal microstructures for composite materials. In Shun-Chin Chou, editor, *Proceedings of [the] 12th Army Symposium on Solid Mechanics: Synergism of Mechanics. Mathematics, and Materials: 4–7 November 1991, Plymouth, Massachusetts*, pages 75–84. Defense Technical Information Center, Ft. Belvoir, VA 22060-5606, USA, 1991. LCCN TA349 .P6 1991. URL `http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA326997#page=74`.

Kublanov:1991:REE

[KM91b] L. Kublanov and Graeme W. Milton. Rigorous estimates for the elastic moduli for a two-dimensional two-phase material. Unpublished manuscript., 1991.

Kang:2006:CPS

[KM06a] Hyeonbae Kang and Graeme W. Milton. On conjectures of Pólya–Szegő and Eshelby. In *Inverse problems, multi-scale analysis and effective medium theory*, volume 408 of *Contemp. Math.*, pages 75–80. American Mathematical Society, Providence, RI, USA, 2006.

Kang:2006:SCP

[KM06b] Hyeonbae Kang and Graeme W. Milton. Solutions to the conjectures of Pólya–Szegő and Eshelby. *arXiv.org*, ??(??):??, September 13, 2006. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/math/0609374`.

Kang:2008:SPS

[KM08] Hyeonbae Kang and Graeme W. Milton. Solutions to the Pólya–Szegő conjecture and the Weak Eshelby Conjecture. *Archive for Rational Mechanics and Analysis*, 188(1):93–116, April 2008. CODEN AVRMAW. ISSN 0003-9527 (print), 1432-0673 (electronic). URL `http://link.springer.com/article/10.1007/s00205-007-0087-z`.

Kang:2012:BVFb

[KM12] Hyeonbae Kang and Graeme W. Milton. Bounds on the volume fractions of two materials in a three dimensional body from boundary measurements by the translation method. *arXiv.org*, ??(??): ??, June 4, 2012. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1206.0631`.

Kang:2013:BVF

[KM13] Hyeonbae Kang and Graeme W. Milton. Bounds on the volume fractions of two materials in a three-dimensional body from boundary measurements by the translation method. *SIAM Journal on Applied Mathematics*, 73(1):475–492, ???? 2013. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/doi/abs/10.1137/120879713`.

Kochmann:2014:RBEa

[KM14a] Dennis M. Kochmann and Graeme W. Milton. Rigorous bounds on the effective moduli of composites and inhomogeneous bodies with negative-stiffness phases. *arXiv.org*, ??(??):??, June 16, 2014. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1401.4142`.

Kochmann:2014:RBEb

[KM14b] Dennis M. Kochmann and Graeme W. Milton. Rigorous bounds on the effective moduli of composites and inhomogeneous bodies with negative-stiffness phases. *Journal of the Mechanics and Physics of Solids*, 71:46–63, November 2014. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509614001367`.

Kern:2018:THE

[KMKW18] Christian Kern, Graeme W. Milton, Muamer Kadic, and Martin Wegener. Theory of the Hall effect in three-dimensional meta-

materials. *New Journal of Physics*, 20(8):083034, August 2018. CODEN NJOPFM. ISSN 1367-2630.

Kadic:2019:M

[KMvHW19] Muamer Kadic, Graeme W. Milton, Martin van Hecke, and Martin Wegener. 3D metamaterials. *Nature Reviews Physics*, 1(3): 198–210, January 2019. ISSN 2522-5820.

Kang:2012:EIP

[KMW12a] Hyeonbae Kang, Graeme Milton, and Jenn-Nan Wang. Equivalence of inverse problems for 2D elasticity and for the thin plate with finite measurements and its applications. *arXiv.org*, ??(??): ??, March 17, 2012. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1203.3833`.

Kang:2012:BVFa

[KMW12b] Hyeonbae Kang, Graeme W. Milton, and Jenn-Nan Wang. Bounds on the volume fraction of the two-phase shallow shell using one measurement. *arXiv.org*, ??(??):??, April 23, 2012. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1204.4962`.

Kang:2014:BVF

[KMW14] Hyeonbae Kang, Graeme W. Milton, and Jenn-Nan Wang. Bounds on the volume fraction of the two-phase shallow shell using one measurement. *Journal of Elasticity*, 114(1):41–53, January 2014. CODEN JELSAY. ISSN 0374-3535 (print), 1573-2681 (electronic). URL `http://link.springer.com/article/10.1007/s10659-012-9425-y`.

Lukkassen:2002:HSR

[LM02] Dag Lukkassen and Graeme W. Milton. On hierarchical structures and reiterated homogenization. In *Function spaces, interpolation theory and related topics (Lund, 2000)*, pages 355–368. de Gruyter, Berlin, Germany, 2002.

Lim:2020:IGS

[LM20] Mikyoung Lim and Graeme W. Milton. Inclusions of general shapes having constant field inside the core and nonelliptical neutral coated inclusions with anisotropic conductivity. *SIAM Journal on Applied Mathematics*, 80(3):1420–1440, ???? 2020. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic).

Lopez-Pamies:2009:MEH

[LPP09] O. Lopez-Pamies and P. Ponte Castañeda. Microstructure evolution in hyperelastic laminates and implications for overall behavior and macroscopic stability. *Mechanics of Materials: An International Journal*, 41(4):364–374, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000040`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Milton:1997:EVM

[MB97] Graeme W. Milton and James G. Berryman. On the effective viscoelastic moduli of two-phase media. II. Rigorous bounds on the complex shear modulus in three dimensions. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 453(1964):1849–1880, September 8, 1997. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/453/1964/1849`.

Milton:2014:IRC

[MB14] Graeme W. Milton and M. Briane. Isotropic realizability of current fields in $\mathbf{R}^3$. *arXiv.org*, ??(??):??, ???? 2014. ISSN 2331-8422. URL `https://arxiv.org/abs/1409.7658`.

Milton:2016:PEE

[MBH16] Graeme W. Milton, Marc Briane, and Davit Harutyunyan. On the possible effective elasticity tensors of 2-dimensional and 3-dimensional printed materials. *arXiv.org*, ??(??):??, June 10, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1606.03305`. Published in Math. Mech. Compl. Sys. 5 (2017) 41-94.

Milton:2017:PEE

[MBH17] Graeme W. Milton, Marc Briane, and Davit Harutyunyan. On the possible effective elasticity tensors of 2-dimensional and 3-dimensional printed materials. *Mathematics and Mechanics of Complex Systems*, 5(1):41–94, 2017. ISSN 2325-3444 (print), 2326-7186 (electronic).

Milton:2006:CEP

[MBW06] Graeme W. Milton, Marc Briane, and John R. Willis. On cloaking for elasticity and physical equations with a transfor-

mation invariant form. *New Journal of Physics*, 8(10):248, October 2006. CODEN NJOPFM. ISSN 1367-2630. URL `http://iopscience.iop.org/1367-2630/8/10/248; http://iopscience.iop.org/article/10.1088/1367-2630/8/10/248/`.

Milton:1993:MET

[MC93] G. W. Milton and A. V. Cherkaev. Materials with elastic tensors that range over the entire set compatible with thermodynamics. *Abstracts of the Joint ASCE-ASME-SES Meeting, June, 1993*, ?? (??):6–9, ???? 1993.

Milton:1995:WET

[MC95] Graeme W. Milton and Andrej V. Cherkaev. Which elasticity tensors are realizable? *Journal of Engineering Materials and Technology*, 117(4):483–493, October 1, 1995. CODEN JEMTA8. ISSN 0094-4289 (print), 1528-8889 (electronic).

Milton:2017:NOP

[MCE17] Graeme W. Milton and Mohamed Camar-Eddine. Near optimal pentamodes as a tool for guiding stress while minimizing compliance in $3D$-printed materials: a complete solution to the weak G-closure problem for $3D$-printed materials. *arXiv.org*, ??(??):??, December 6, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1712.02292`.

Milton:2018:NOP

[MCE18] Graeme W. Milton and Mohamed Camar-Eddine. Near optimal pentamodes as a tool for guiding stress while minimizing compliance in $3D$-printed materials: a complete solution to the weak G-closure problem for $3D$-printed materials. *Journal of the Mechanics and Physics of Solids*, 114:194–208, 2018. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic).

Milton:1997:FFR

[MEM97] Graeme W. Milton, David J. Eyre, and Joseph V. Mantese. Finite frequency range Kramers–Kronig relations: Bounds on the dispersion. *Physical Review Letters*, 79(16):3062–3065, October 20, 1997. CODEN PRLTAO. ISSN 0031-9007 (print), 1079-7114 (electronic), 1092-0145.

Milton:1983:CFD

[MF83] Graeme W. Milton and Michael E. Fisher. Continuum fluids with a discontinuity in the pressure. *Journal of Statistical Physics*, 32 (2):413–438, August 1983. CODEN JSTPSB. ISSN 0022-4715 (print), 1572-9613 (electronic). URL `http://link.springer.com/article/10.1007/BF01012719`.

Milton:1985:TCC

[MG85] Graeme W. Milton and Kenneth M. Golden. Thermal conduction in composites. In T. Ashworth and D. R. Smith, editors, *Thermal Conductivity*, volume 18, pages 571–582. Plenum Press, New York / London, 1985. ISBN 0-306-41918-1. LCCN QC 320.8 I58 1983.

Milton:1990:RCF

[MG90] Graeme W. Milton and Kenneth M. Golden. Representations for the conductivity functions of multicomponent composites. *Communications on Pure and Applied Mathematics (New York)*, 43(5): 647–671, 1990. CODEN CPAMAT, CPMAMV. ISSN 0010-3640 (print), 1097-0312 (electronic).

Milton:2003:PSI

[MGDV03] Graeme W. Milton, K. M. Golden, D. Dobson, and Z. V. Vardeny, editors. *Proceedings of the Sixth International Conference on Electrical Transport and Optical Properties of Inhomogeneous Media: ETOPIM 6, held in Snowbird, UT, USA, 15–19 July 2002*, volume 338(1–4) of *Physica B, Condensed Matter*. North-Holland, Amsterdam, The Netherlands, 2003. ISSN 0921-4526 (print), 1873-2135 (electronic). URL `http://www.elseview.com/locate/physb; https://www.math.utah.edu/etopim/`.

Milton:2016:TCC

[MHB16] Graeme W. Milton, Davit Harutyunyan, and Marc Briane. Towards a complete characterization of the effective elasticity tensors of mixtures of an elastic phase and an almost rigid phase. *arXiv.org*, ??(??):??, June 12, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1606.03722`. Published in Math. Mech. Compl. Sys. 5 (2017) 95–113.

Milton:2017:TCC

[MHB17] Graeme W. Milton, Davit Harutyunyan, and Marc Briane. Towards a complete characterization of the effective elasticity tensors

of mixtures of an elastic phase and an almost rigid phase. *Mathematics and Mechanics of Complex Systems*, 5(1):95–113, 2017. ISSN 2325-3444 (print), 2326-7186 (electronic).

Milton:1979:TST

[Mil79] Graeme W. Milton. Theoretical studies of the transport properties of inhomogeneous media. Unpublished report TP/79/1, University of Sydney, Sydney, Australia, 1979. 1–65 pp.

Milton:1980:BCD

[Mil80] Graeme W. Milton. Bounds on the complex dielectric constant of a composite material. *Applied Physics Letters*, 37(3):300–302, August 1, 1980. CODEN APPLAB. ISSN 0003-6951 (print), 1077-3118 (electronic), 1520-8842.

Milton:1981:BCP

[Mil81a] Graeme W. Milton. Bounds on the complex permittivity of a two-component composite material. *Journal of Applied Physics*, 52(8):5286–5293, August 1, 1981. CODEN JAPIAU. ISSN 0021-8979 (print), 1089-7550 (electronic), 1520-8850. URL `http://scitation.aip.org/content/aip/journal/jap/52/8/10.1063/1.329385`.

Milton:1981:BEE

[Mil81b] Graeme W. Milton. Bounds on the electromagnetic, elastic, and other properties of two-component composites. *Physical Review Letters*, 46(8):542–545, February 23, 1981. CODEN PRLTAO. ISSN 0031-9007 (print), 1079-7114 (electronic), 1092-0145.

Milton:1981:BTO

[Mil81c] Graeme W. Milton. Bounds on the transport and optical properties of a two-component composite material. *Journal of Applied Physics*, 52(8):5294–5304, August 1981. CODEN JAPIAU. ISSN 0021-8979 (print), 1089-7550 (electronic), 1520-8850. URL `http://scitation.aip.org/content/aip/journal/jap/52/8/10.1063/1.329386`.

Milton:1981:CBT

[Mil81d] Graeme W. Milton. Concerning bounds on the transport and mechanical properties of multicomponent composite materials. *Applied Physics*, A26(2):125–130, 1981. CODEN APAMFC. ISSN 0947-8396 (print), 1432-0630 (electronic).

Milton:1982:BET

[Mil82] Graeme W. Milton. Bounds on the elastic and transport properties of two-component composites. *Journal of the Mechanics and Physics of Solids*, 30(3):177–191, 1982. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022509682900229`.

Milton:1984:CEEb

[Mil84a] Graeme W. Milton. Correlation of the electromagnetic and elastic properties of composites and microgeometries corresponding with effective medium theory. In D. L. Johnson and P. N. Sen, editors, *Physics and Chemistry of Porous Media: Papers from a Symposium Held at Schlumberger–Doll Research, Oct. 24–25, 1983*, volume 107 of *AIP Conference Proceedings*, pages 66–77. American Institute of Physics, Woodbury, New York, 1984. CODEN APCPCS. ISBN 0-88318-306-4. ISSN 0094-243X (print), 1551-7616 (electronic), 1935-0465. LCCN TA418.9.P6 P46 1983. URL `http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.34306`.

Milton:1984:CEEa

[Mil84b] Graeme W. Milton. Correlation of the electromagnetic and elastic properties of composities and microgeometries corresponding with effective medium approximations. In D. L. Johnson and P. N. Sen, editors, *Physics and Chemistry of Porous Media: Papers from a Symposium Held at Schlumberger–Doll Research, Oct. 24–25, 1983*, volume 107, pages 52–65. American Institute of Physics, Woodbury, New York, 1984. CODEN APCPCS. ISBN 0-88318-306-4. ISSN 0094-243X (print), 1551-7616 (electronic), 1935-0465. LCCN TA418.9.P6 P46 1983. URL `http://scitation.aip.org/content/aip/proceeding/aipcp/10.1063/1.34305`.

Milton:1985:CPA

[Mil85a] Graeme W. Milton. The coherent potential approximation is a realizable effective medium scheme. *Communications in Mathematical Physics*, 99(4):463–500, 1985. CODEN CMPHAY. ISSN 0010-3616 (print), 1432-0916 (electronic). URL `http://link.springer.com/article/10.1007/BF01215906; http://projecteuclid.org/euclid.cmp/1103942837`.

Milton:1985:SEM

[Mil85b] Graeme W. Milton. *Some exotic models in statistical physics. I. The coherent potential approximation is a realizable effective medium scheme. II. Anomalous first-order transitions*. Ph.D. thesis, Cornell University, Ithaca, New York., 1985. x + 164 pp. URL `http://search.proquest.com/dissertations/docview/303393850/`.

Milton:1986:MPC

[Mil86a] Graeme W. Milton. Modeling the properties of composites by laminates. In J. L. Ericksen, David Kinderlehrer, Robert V. Kohn, and Jacques-Louis Lions, editors, *Homogenization and Effective Moduli of Materials and Media: Papers presented at a Workshop on Homogenization of Differential Equations and the Detemination of Effective Moduli of Materials and Media, Primarily in the Context of Continuum Theory; Minneapolis, MN, October 22–October 26, 1984*, volume 1 of *The IMA Volumes in Mathematics and its Applications*, pages 150–174. Springer-Verlag, Berlin / Heidelberg / London / etc., 1986. ISBN 0-387-96306-5. LCCN QA808.2 .H661 1986.

Milton:1986:APLG

[Mil86b] Graeme W. Milton. A proof that laminates generate all possible effective conductivity functions of two-dimensional, two-phase media. In George C. Papanicolaou, editor, *Advances in Multiphase Flow and Related Problems: Proceedings of the Workshop on Cross Disciplinary Research in Multiphase Flow, Leesburg, Virginia, June 2–4, 1986*, pages 136–146. SIAM Press, Philadelphia, 1986. ISBN 0-89871-212-2. LCCN QA922 .W671 1986.

Milton:1987:MCEa

[Mil87a] Graeme W. Milton. Multicomponent composites, electrical networks and new types of continued fraction. I. *Communications in Mathematical Physics*, 111(2):281–327, 1987. CODEN CMPHAY. ISSN 0010-3616 (print), 1432-0916 (electronic). URL `http://projecteuclid.org/euclid.cmp/1104159541`.

Milton:1987:MCEb

[Mil87b] Graeme W. Milton. Multicomponent composites, electrical networks and new types of continued fraction. II. *Communications in Mathematical Physics*, 111(3):329–372, 1987. CODEN CMPHAY. ISSN 0010-3616 (print), 1432-0916 (electronic). URL `http://projecteuclid.org/euclid.cmp/1104159635`.

Milton:1988:CHE

[Mil88] Graeme W. Milton. Classical Hall-effect in two-dimensional composites: a characterization of the set of realizable effective conductivity tensors. *Physical Review B: Condensed Matter and Materials Physics*, 38(16):11296–11303, December 1, 1988. CODEN PRBMDO. ISSN 1098-0121. URL `http://journals.aps.org/prb/abstract/10.1103/PhysRevB.38.11296`.

Milton:1990:BRT

[Mil90a] Graeme W. Milton. A brief review of the translation method for bounding effective elastic tensors of composites. In Gérard A. Maugin, editor, *Continuum models and discrete systems: [contains the texts of most of the short contributions presented at the Sixth International Symposium on Continuum Models and Discrete Systems ... held on the campus of the University of Bourgogne, Dijon, France, from June 25 to June 29, 1989] Vol. 1*, volume 1 of *Interaction of Mechanics and Mathematics Series, Longman, Essex*, pages 60–74. Longman Scientific and Technical, Harlow, Essex, UK, 1990. ISBN 0-582-05121-5.

Milton:1990:CSP

[Mil90b] Graeme W. Milton. On characterizing the set of possible effective tensors of composites: The variational method and the translation method. *Communications on Pure and Applied Mathematics (New York)*, 43(1):63–125, 1990. CODEN CPAMAT, CPMAMV. ISSN 0010-3640 (print), 1097-0312 (electronic). URL `http://onlinelibrary.wiley.com/doi/10.1002/cpa.3160430104/full`.

Milton:1991:FER

[Mil91] Graeme W. Milton. The field equation recursion method. In Gianni Dal Maso and Gianfausto F. Dell'Antonio, editors, *Composite Media and Homogenization Theory: Proceedings of the Workshop on Composite Media and Homogenization Theory Held in Trieste, Italy, from January 15 to 26, 1990*, volume 5 of *Progress in Nonlinear Differential Equations and Their Applications*, pages 223–245. Birkhäuser Verlag, Basel, Switzerland, 1991. ISBN 0-8176-3511-4, 3-7643-3511-4. LCCN QA808.2 .C665 1991. URL `http://link.springer.com/chapter/10.1007/978-1-4684-6787-1_13`.

Milton:1992:CMP

[Mil92] Graeme W. Milton. Composite materials with Poisson's ratios close to -1. *Journal of the Mechanics and Physics of Solids*, 40 (5):1105–1137, July 1992. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic).

Milton:1994:LBS

[Mil94] Graeme W. Milton. A link between sets of tensors stable under lamination and quasiconvexity. *Communications on Pure and Applied Mathematics (New York)*, 47(7):959–1003, 1994. CODEN CPAMAT, CPMAMV. ISSN 0010-3640 (print), 1097-0312 (electronic). URL `http://onlinelibrary.wiley.com/doi/10.1002/cpa.3160470704/full`.

Milton:1997:CMM

[Mil97a] Graeme W. Milton. Composites: A myriad of microstructure independent relations. In T. Tatsumi, E. Watanabe, and T. Kambe, editors, *Theoretical and Applied Mechanics 1996: Proceedings of the XIXth International Congress of Theoretical and Applied Mechanics, Kyoto, Japan, 25–31 August 1996*, pages 443–459. Elsevier, Amsterdam, The Netherlands, 1997. ISBN 0-444-82446-4. LCCN QA801 .I39 1996.

Milton:1997:ERC

[Mil97b] Graeme W. Milton. Exact relations for composites: Towards a complete solution. *Documenta Mathematica*, Extra volume ICM 1998 III:623–632, 1997. ISSN 1431-0643. URL `http://www.mathunion.org/ICM/ICM1998.3/Main/16/Milton.MAN.ocr.pdf`.

Milton:2001:PCC

[Mil01] Graeme W. Milton. Proof of a conjecture on the conductivity of checkerboards. *Journal of Mathematical Physics*, 42(10):4873–4882, October 2001. CODEN JMAPAQ. ISSN 0022-2488 (print), 1089-7658 (electronic), 1527-2427. URL `http://scitation.aip.org/content/aip/journal/jmp/42/10/10.1063/1.1385564`.

Milton:2002:TC

[Mil02] Graeme W. Milton. *The Theory of Composites*, volume 6 of *Cambridge Monographs on Applied and Computational Mathematics*. Cambridge University Press, Cambridge, UK, 2002. ISBN 0-521-78125-6. xxviii + 719 pp. LCCN TA418.9.C6 M58 2001. US$80.

URL https://www.math.utah.edu/books/tcbook. Series editors: P. G. Ciarlet, A. Iserles, Robert V. Kohn, and M. H. Wright.

Milton:2003:EBS

[Mil03] Graeme W. Milton. Exact band structure for the scalar wave equation with periodic complex moduli. *Physica. B, Condensed Matter*, 338(1–4):186–189, October 2003. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0921452603004848.

Milton:2004:EPB

[Mil04a] Graeme W. Milton. The exact photonic band structure for a class of media with periodic complex moduli. *Methods and Applications of Analysis*, 11(3):413–421, 2004. ISSN 1073-2772 (print), 1945-0001 (electronic). URL http://projecteuclid.org/euclid.maa/1147353063.

Milton:2004:ERP

[Mil04b] Graeme W. Milton. Exact results for the piezoelectric properties of composite ellipsoid assemblages (keynote lecture). In J. S. Yang, editor, *The 41st annual technical meeting of the Society of Engineering Science (SES-2004) held at the Cornhusker Hotel in downtown Lincoln, Nebraska during October 10–13, 2004*, International journal of applied electromagnetics and mechanics, page ?? IOS Press, Amsterdam, The Netherlands, ???? 2004. ISBN ???? ISSN 1383-5416 (print), 1875-8800 (electronic). LCCN ???? URL https://ses.confex.com/ses/2004tm/techprogram/P1230.HTM.

Milton:2005:OPH

[Mil05] Graeme W. Milton. On optimizing the properties of hierarchical laminates using Pontryagin's maximum principle. *Multiscale Modeling & Simulation*, 3(3):658–679 (electronic), 2005. CODEN MMSUBT. ISSN 1540-3459 (print), 1540-3467 (electronic). URL http://epubs.siam.org/sam-bin/dbq/article/60236.

Milton:2007:CNP

[Mil07a] Graeme W. Milton. Cloaking: A new phenomenon in electromagnetism and elasticity. In Anonymous, editor, *Photonic metamaterials: from random to periodic: 4–7 June 2007, Jackson Hole, Wyoming, United States*, page ?? OSA Publishing, Washington, DC, USA, 2007. ISBN 1-55752-839-X. URL http://www.osapublishing.org/abstract.cfm?uri=META-2007-TuD1.

Milton:2007:NMMa

[Mil07b] Graeme W. Milton. New metamaterials with macroscopic behavior outside that of continuum elastodynamics. *arXiv.org*, ??(??): ??, June 14, 2007. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/0706.2202`.

Milton:2007:NMMb

[Mil07c] Graeme W. Milton. New metamaterials with macroscopic behavior outside that of continuum elastodynamics. *New Journal of Physics*, 9(10):359, 2007. CODEN NJOPFM. ISSN 1367-2630. URL `http://iopscience.iop.org/1367-2630/9/10/359`.

Milton:2010:RMPa

[Mil10a] Graeme W. Milton. Realizability of metamaterials with prescribed electric permittivity and magnetic permeability tensors. *arXiv.org*, ??(??):??, January 15, 2010. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1001.2761`.

Milton:2010:RMPb

[Mil10b] Graeme W. Milton. Realizability of metamaterials with prescribed electric permittivity and magnetic permeability tensors. *New Journal of Physics*, 12(3):033035, 2010. CODEN NJOPFM. ISSN 1367-2630. URL `http://stacks.iop.org/1367-2630/12/i=3/a=033035`.

Milton:2011:UBE

[Mil11] Graeme W. Milton. Universal bounds on the electrical and elastic response of two-phase bodies and their application to bounding the volume fraction from boundary measurements. *arXiv.org*, ??(??):??, May 4, 2011. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1105.0954`.

Milton:2012:UBE

[Mil12a] Graeme W. Milton. Universal bounds on the electrical and elastic response of two-phase bodies and their application to bounding the volume fraction from boundary measurements. *Journal of the Mechanics and Physics of Solids*, 60(1):139–155, 2012. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509611001748`.

Milton:2012:ANB

[Mil12b] Graeme Walter Milton. Adaptable nonlinear bimode metamaterials with rigid bars, pivots, and actuators. *arXiv.org*, ??(??):??, June 1, 2012. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1206.0325`.

Milton:2012:CCM

[Mil12c] Graeme Walter Milton. Complete characterization of the macroscopic deformations of periodic unimode metamaterials of rigid bars and pivots. *arXiv.org*, ??(??):??, May 28, 2012. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1205.6213`.

Milton:2013:SIG

[Mil13a] Graeme W. Milton. Sharp inequalities that generalize the divergence theorem: an extension of the notion of quasiconvexity. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 469(2157):20130075, 18, 2013. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/469/2157/20130075`. See addendum [Mil15a].

Milton:2013:SIW

[Mil13b] Graeme W. Milton. Sharp inequalities which generalize the divergence theorem — an extension of the notion of quasiconvexity, with an addendum. *arXiv.org*, ??(??):??, February 5, 2013. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1302.0942`.

Milton:2013:ANB

[Mil13c] Graeme Walter Milton. Adaptable nonlinear bimode metamaterials using rigid bars, pivots, and actuators. *Journal of the Mechanics and Physics of Solids*, 61(7):1561–1568, 2013. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic).

Milton:2013:CCM

[Mil13d] Graeme Walter Milton. Complete characterization of the macroscopic deformations of periodic unimode metamaterials of rigid bars and pivots. *Journal of the Mechanics and Physics of Solids*, 61(7):1543–1560, 2013. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic).

Milton:2014:NET

[Mil14] Graeme Walter Milton. New examples of three-dimensional dilational materials. *arXiv.org*, ??(??):??, October 15, 2014. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1410.4143`.

Milton:2015:ASI

[Mil15a] Graeme W. Milton. Addendum to 'Sharp inequalities that generalize the divergence theorem: an extension of the notion of quasi-convexity' [MR3078206]. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 471 (2176):20140886, March 4, 2015. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/471/2176/20140886.abstract`. See [Mil13a].

Milton:2015:ASC

[Mil15b] Graeme W. Milton. The algebra of subspace collections and their association with rational functions of several variables. *arXiv.org*, ??(??):??, ???? 2015. ISSN 2331-8422. URL `https://arxiv.org/abs/1504.08061`.

Milton:2015:NET

[Mil15c] Graeme W. Milton. New examples of three-dimensional dilational materials. *Physica Status Solidi. B, Basic Research*, 252(7):1426–1430, July 2015. CODEN PSSBBD. ISSN 0370-1972 (print), 1521-3951 (electronic). URL `http://onlinelibrary.wiley.com/doi/10.1002/pssb.201552297/abstract`.

Milton:2015:SAS

[Mil15d] Graeme W. Milton. Superfunctions and the algebra of subspace collections and their association with rational functions of several complex variables. *arXiv.org*, ??(??):??, April 30, 2015. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1504.08061`.

Milton:2016:AFM

[Mil16a] Graeme W. Milton. Accelerating FFT methods for conducting composites. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 8, pages 235–254. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:AMa

[Mil16b] Graeme W. Milton. Analytic materials. *arXiv.org*, ??(??):??, October 18, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1610.06059`.

Milton:2016:AMb

[Mil16c] Graeme W. Milton. Analytic materials. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 472(2195):20160613:1–20160613:20, November 16, 2016. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/472/2195/20160613`.

Milton:2016:CFL

[Mil16d] Graeme W. Milton. Canonical forms for linear physics equations and key identities. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 1, pages 1–46. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:CAA

[Mil16e] Graeme W. Milton. Composites and the associated abstract theory. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 2, pages 47–76. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:DMS

[Mil16f] Graeme W. Milton. The desymmetrization method for solving the Schrödinger equation. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 12, pages 319–336. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:ETC

[Mil16g] Graeme W. Milton, editor. *Extending the Theory of Composites to Other Areas of Science*. Milton–Patton Publishers, P.O. Box 581077, Salt Lake City, UT 85148, USA, 2016. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). xx + 422 pp. LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:GFS

[Mil16h] Graeme W. Milton. Green's functions for self-adjoint and non-self-adjoint operators. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 14, pages 355–368. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:IP

[Mil16i] Graeme W. Milton. The inverse problem. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 5, pages 123–148. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:NPB

[Mil16j] Graeme W. Milton. A new perspective on boundary value problems. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 3, pages 77–94. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:PFT

[Mil16k] Graeme W. Milton. Projection Functional Theory for finding excited states. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 11, pages 309–318. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:SAS

[Mil16l] Graeme W. Milton. Superfunctions and the algebra of subspace collections. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 7, pages 179–234. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:VPC

[Mil16m] Graeme W. Milton. Variational principles and Q_C^*-convex functions for Schrödinger's equation. In *Extending the Theory of Composites to Other Areas of Science* [Mil16g], chapter 13, pages 337–354. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Miller:2017:SMF

[Mil17a] Johanna L. Miller. Semiconductor metamaterial fools the Hall effect. *Physics Today*, 70(2):21–23, February 2017. CODEN PHTOAD. ISSN 0031-9228 (print), 1945-0699 (electronic). URL `http://physicstoday.scitation.org/na101/home/literatum/publisher/aip/journals/content/pto/2017/pto.2017.70.issue-2/pto.2017.70.issue-2/20170202/pto.2017.70.issue-2.cover.jpg`. The journal issue cover image is based on work by Graeme Milton and colleagues.

Milton:2017:AET

[Mil17b] Graeme W. Milton. Approximating the effective tensor as a function of the component tensors in two-dimensional composites of two anisotropic phases. *arXiv.org*, ??(??):??, May 7, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1705.02633`.

Milton:2017:BCP

[Mil17c] Graeme W. Milton. Bounds on complex polarizabilities and a new perspective on scattering by a lossy inclusion. *arXiv.org*, ??(??):??, April 22, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1704.06832`. Published in Phys. Rev. B 96, 104206 (2017).

Milton:2017:SFI

[Mil17d] Graeme W. Milton. The set of forces that ideal trusses, or wire webs, under tension can support. *arXiv.org*, ??(??):??, April 30, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1705.00381`.

Milton:2018:SC

[Mil18a] G. W. Milton. Stiff competition. *Nature*, 564(7734):E1, December 56, 2018. CODEN NATUAS. ISSN 0028-0836 (print), 1476-4687 (electronic).

Milton:2018:AET

[Mil18b] Graeme W. Milton. Approximating the effective tensor as a function of the component tensors in two-dimensional composites of two anisotropic phases. *SIAM Journal on Mathematical Analysis*, 50(3):3327–3364, ???? 2018. CODEN SJMAAH. ISSN 0036-1410 (print), 1095-7154 (electronic).

Milton:2018:NRFb

[Mil18c] Graeme W. Milton. A new route to finding bounds on the generalized spectrum of many physical operators. *Journal of Mathematical Physics*, 59(6):061508, 23, 2018. CODEN JMAPAQ. ISSN 0022-2488.

Milton:2018:NRFa

[Mil18d] Graeme W. Milton. A new route to finding bounds on the spectrum of many physical operators. *arXiv.org*, ??(??):??, March 10, 2018. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1803.03726`.

Milton:2020:PED

[Mil20] Graeme W. Milton. A possible explanation of dark matter and dark energy involving a vector torsion field. *arXiv.org*, ??(??):1–14, March 25, 2020. URL `https://arxiv.org/abs/2003.11587`.

Milton:1988:VBE

[MK88] Graeme W. Milton and Robert V. Kohn. Variational bounds on the effective moduli of anisotropic composites. *Journal of the Mechanics and Physics of Solids*, 36(6):597–629, 1988. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/0022509688900014`.

Milton:2006:SCP

[MK06] Graeme W. Milton and H. Kang. Solutions to the conjectures of Pólya–Szegő and Eshelby. *arXiv.org*, ??(??):??, ???? 2006. ISSN 2331-8422. URL `https://arxiv.org/abs/math/0609374`.

McPhedran:1981:BET

[MM81] Ross C. McPhedran and Graeme W. Milton. Bounds and exact theories for the transport properties of inhomogeneous media. *Applied Physics A: Materials Science & Processing*, 26(4):207–220, December 1981. CODEN APSFDB. ISSN 0721-7250.

Milton:1982:CTM

[MM82] Graeme W. Milton and Ross C. McPhedran. A comparison of two methods for deriving bounds on the effective conductivity of composites. In Robert Burridge, Stephen Childress, and George C. Papanicolaou, editors, *Macroscopic Properties of Disordered Media: Proceedings of a Conference Held at the Courant Institute, June 1–3, 1981*, volume 154 of *Lecture Notes in Physics*, pages

183–193. Springer-Verlag, Berlin / Heidelberg / London / etc., 1982. ISBN 0-387-11202-2. LCCN QA911 .M32 1981.

McPhedran:1987:TPT

[MM87] Ross C. McPhedran and Graeme W. Milton. Transport properties of touching cylinder pairs and of the square array of touching cylinders. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 411(1841):313–326, June 8, 1987. CODEN PRLAAZ. ISSN 0080-4630. URL `http://rspa.royalsocietypublishing.org/content/411/1841/313`.

McPhedran:1990:ITP

[MM90] Ross C. McPhedran and Graeme W. Milton. Inverse transport problems for composite media. *Materials Research Society Symposium Proceedings*, 195(??):257–274, 1990. CODEN MRSPDH. ISSN 1946-4274. URL `http://journals.cambridge.org/abstract_S1946427400554219`.

Milton:1995:CBP

[MM95] Graeme W. Milton and A. B. Movchan. A correspondence between plane elasticity and the two-dimensional real and complex dielectric equations in anisotropic media. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 450(1939):293–317, August 1995. CODEN PRLAAZ. ISSN 0080-4630.

Milton:1998:MCP

[MM98] Graeme W. Milton and A. B. Movchan. Mapping certain planar elasticity problems to antiplane ones. *European Journal of Mechanics, A, Solids*, 17(1):1–11, 1998. CODEN EJASEV. ISSN 0997-7538 (print), 1873-7285 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0997753898800600`.

Mattei:2015:BRV

[MM15] Ornella Mattei and Graeme W. Milton. Bounds for the response of viscoelastic composites under antiplane loadings in the time domain. *arXiv.org*, ??(??):??, December 30, 2015. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1602.03383`. To be published as a chapter of the book *Extending the Theory of Composites to Other Areas of Science*, edited by G. W. Milton, and as a part of the PhD thesis *On bounding the response of linear viscoelastic composites in the time domain: The variational*

approach and the analytic method by O. Mattei, Università degli Studi di Brescia.

Mattei:2016:BTR

[MM16a] Ornella Mattei and Graeme W. Milton. Bounds for the transient response of viscoelastic composites. In Milton [Mil16g], chapter 6, pages 149–178. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milgrom:2016:RLI

[MM16b] Mordehai Milgrom and Graeme W. Milton. The response of linear inhomogeneous systems to coupled fields: Bounds and perturbation expansions. *arXiv.org*, ??(??):??, February 21, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1602.06487`. To appear as Chapter 9 in the book *Extending the Theory of Composites to other Areas of Science*, edited by Graeme W. Milton.

Milgrom:2016:RSC

[MM16c] Mordehai Milgrom and Graeme W. Milton. The response of systems with coupled fields. In Milton [Mil16g], chapter 9, pages 255–286. ISBN 1-4835-6919-5 (print), 1-4835-6920-9 (e-book). LCCN ???? URL `https://www.math.utah.edu/books/milton`.

Milton:2016:FPN

[MM16d] Graeme W. Milton and Ornella Mattei. Field patterns: A new mathematical object. *arXiv.org*, ??(??):??, November 18, 2016. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1611.06257; https://arxiv.org/abs/1611.06257v1`. Published in Proc. R. Soc. A 20160819.

Mattei:2017:FPNa

[MM17a] Ornella Mattei and Graeme W. Milton. Field patterns: a new type of wave with infinitely degenerate band structure. *arXiv.org*, ??(??):??, July 6, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1707.05756`.

Mattei:2017:FPNb

[MM17b] Ornella Mattei and Graeme W. Milton. Field patterns: A new type of wave with infinitely degenerate band structure. *Europhysics Letters*, 120(5):54003:1–54003:6, 2017. CODEN EULEEJ. ISSN 0295-5075 (print), 1286-4854 (electronic). URL `http://stacks.iop.org/0295-5075/120/i=5/a=54003`.

Mattei:2017:FPB

[MM17c] Ornella Mattei and Graeme W. Milton. Field patterns without blow up. *arXiv.org*, ??(??):??, April 27, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1705.00539`.

Milton:2017:FPN

[MM17d] Graeme W. Milton and Ornella Mattei. Field patterns: a new mathematical object. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 473(2198):20160819, February 2017. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic).

Milton:2018:ALR

[MM18] Graeme W. Milton and Ross C. McPhedran. Anomalous localized resonance and associated cloaking. *SIAM News*, 51(6):6, 8, 2018. ISSN 1557-9573.

Milton:1981:TPA

[MMM81] Graeme W. Milton, Ross C. McPhedran, and D. R. McKenzie. Transport properties of arrays of intersecting cylinders. *Applied Physics*, 25(1):23–30, 1981. CODEN APAMFC. ISSN 0947-8396 (print), 1432-0630 (electronic).

McPhedran:1982:ESI

[MMM82] Ross C. McPhedran, D. R. McKenzie, and Graeme W. Milton. Extraction of structural information from measured transport properties of composites. *Applied Physics A: Materials Science & Processing*, 29(1):19–27, September 1982. CODEN APSFDB. ISSN 0721-7250. URL `http://link.springer.com/article/10.1007/BF00618111`.

McPhedran:2009:PCB

[MMM09] R. C. McPhedran, A. B. Movchan, and N. V. Movchan. Platonic crystals: Bloch bands, neutrality and defects. *Mechanics of Materials: An International Journal*, 41(4):356–363, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000027`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Meklachi:2014:SAL

[MMO+14] Taoufik Meklachi, Graeme W. Milton, Daniel Onofrei, Andrew E. Thaler, and Gregory Funchess. Sensitivity of anomalous localized resonance phenomena with respect to dissipation. *arXiv.org*, ?? (??):??, June 26, 2014. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1406.7044`.

Meklachi:2016:SAL

[MMO+16] Taoufik Meklachi, Graeme W. Milton, Daniel Onofrei, Andrew E. Thaler, and Gregory Funchess. Sensitivity of anomalous localized resonance phenomena with respect to dissipation. *Quarterly of Applied Mathematics*, 74(2):201–234, 2016. CODEN QAMAAY. ISSN 0033-569x (print), 1552-4485 (electronic).

Milton:2014:SAL

[MMOT14] Graeme W. Milton, T. Meklachi, D. Onofrei, and A. E. Thaler. Sensitivity of anomalous localized resonance phenomena with respect to dissipation. *arXiv.org*, ??(??):??, ???? 2014. ISSN 2331-8422. URL `https://arxiv.org/abs/1406.7044`.

Movchan:2003:RAS

[MMS03] A. B. Movchan, Graeme W. Milton, and S. K. Serkov. Realizable (average stress, average strain) pairs in a plate with holes. *SIAM Journal on Applied Mathematics*, 63(3):987–1028, 2003. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39571`.

Milton:2013:SEHa

[MMS13a] Graeme W. Milton, Ross C. McPhedran, and Ari Sihvola. The searchlight effect in hyperbolic materials. *arXiv.org*, ??(??):??, February 25, 2013. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1302.5980`.

Milton:2013:SEHb

[MMS13b] Graeme W. Milton, Ross C. McPhedran, and Ari Sihvola. The searchlight effect in hyperbolic materials. *Optics Express*, 21(12): 14926–14942, June 17, 2013. CODEN OPEXFF. ISSN 1094-4087. URL `http://www.osapublishing.org/abstract.cfm?uri=oe-21-12-14926`.

Milton:1999:OCB

[MN99] Graeme W. Milton and V. Nesi. Optimal G-closure bounds via stability under lamination. *Archive for Rational Mechanics and*

Analysis, 150(3):191–207, December 1999. CODEN AVRMAW. ISSN 0003-9527 (print), 1432-0673 (electronic). URL `http://link.springer.com/article/10.1007/s002050050186`.

Milton:2006:CSF

[MN06a] Graeme W. Milton and N. A. P. Nicorovici. Cloaking: Science fiction or reality? In Anonymous, editor, *Photonic metamaterials: from random to periodic, technical digest: June 5–8, 2006, Westin Grand Bahama Island Our Lucaya Resort, Grand Island, the Bahamas*, page ?? OSA Publishing, Washington, DC, USA, 2006. ISBN 1-55752-808-X. LCCN QC759.6 .P46 2006. URL `http://www.osapublishing.org/abstract.cfm?uri=META-2006-TuA3`.

Milton:2006:CEA

[MN06b] Graeme W. Milton and Nicolae-Alexandru P. Nicorovici. On the cloaking effects associated with anomalous localized resonance. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 462(2074):3027–3059, October 2006. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/462/2074/3027`.

Milton:2011:BVF

[MN11] Graeme Walter Milton and Loc Hoang Nguyen. Bounds on the volume fraction of 2-phase, 2-dimensional elastic bodies and on (stress, strain) pairs in composites. *arXiv.org*, ??(??):??, August 29, 2011. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1108.5764`.

Milton:2012:BVF

[MN12] Graeme W. Milton and Loc Hoang Nguyen. Bounds on the volume fraction of 2-phase, 2-dimensional elastic bodies and on (stress, strain) pairs in composites. *Comptes Rendus M'ecanique*, 340(4–5):193–204, 2012. CODEN CRMOC9. ISSN 1631-0721 (print), 1873-7234 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S1631072112000393`.

McPhedran:2009:CPR

[MNBM09] Ross C. McPhedran, Nicolae-Alexandru P. Nicorovici, Lindsay C. Botten, and Graeme W. Milton. Cloaking by plasmonic resonance among systems of particles: cooperation or combat? *Comptes Rendus Physique*, 10(5):391–399, June 2009. CODEN CRPOBN. ISSN 1631-0705 (print), 1878-1535 (electronic).

URL http://www.sciencedirect.com/science/article/pii/S1631070509000413.

Milton:2006:OPL

[MNM06] Graeme W. Milton, Nicolae-Alexandru P. Nicorovici, and Ross C. McPhedran. Opaque perfect lenses. *arXiv.org*, ??(??):??, August 23, 2006. CODEN APRHCB. ISSN 2331-8422. URL https://arxiv.org/abs/physics/0608225. Presented at The 7th International Conference on the Electrical transport and Optical Properties of Inhomogeneous Media (ETOPIM7).

Milton:2007:OPL

[MNM07] Graeme W. Milton, Nicolae-Alexandru P. Nicorovici, and Ross C. McPhedran. Opaque perfect lenses. *Physica. B, Condensed Matter*, 394(2):171–175, May 15, 2007. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic). URL http://www.sciencedirect.com/science/article/pii/S0921452606018941.

Milton:2008:SFGa

[MNM+08a] Graeme W. Milton, Nicolae-Alexandru P. Nicorovici, Ross C. McPhedran, Kirill Cherednichenko, and Zubin Jacob. Solutions in folded geometries, and associated cloaking due to anomalous resonance. *arXiv.org*, ??(??):??, April 24, 2008. CODEN ???? ISSN 2331-8422. URL https://arxiv.org/abs/0804.3903.

Milton:2008:SFGb

[MNM+08b] Graeme W. Milton, Nicolae-Alexandru P. Nicorovici, Ross C. McPhedran, Kirill Cherednichenko, and Zubin Jacob. Solutions in folded geometries, and associated cloaking due to anomalous resonance. *New Journal of Physics*, 10(11):115021, November 2008. CODEN NJOPFM. ISSN 1367-2630. URL http://stacks.iop.org/1367-2630/10/i=11/a=115021.

Milton:2005:PSQ

[MNMP05] Graeme W. Milton, Nicolae-Alexandru P. Nicorovici, Ross C. McPhedran, and Viktor A. Podolskiy. A proof of superlensing in the quasistatic regime, and limitations of superlenses in this regime due to anomalous localized resonance. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 461(2064):3999–4034, December 8, 2005. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL http://rspa.royalsocietypublishing.org/content/461/2064/3999.

Milton:2017:ERG

[MO17] Graeme W. Milton and Daniel Onofrei. Exact relations for Green's functions in linear PDE and boundary field equalities: a generalization of conservation laws. *arXiv.org*, ??(??):??, December 10, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1712.03597`.

Milton:2019:ERG

[MO19] Graeme W. Milton and Daniel Onofrei. Exact relations for Green's functions in linear PDE and boundary field equalities: a generalization of conservation laws. *Research in the Mathematical Sciences*, 6(2):Paper No. 19, 36, 2019. ISSN 2522-0144 (print), 2197-9847 (electronic).

McPhedran:1988:ASC

[MPM88] Ross C. McPhedran, L. Poladian, and Graeme W. Milton. Asymptotic studies of closely spaced, highly conducting cylinders. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 415(1848):185–196, 1988. CODEN PRLAAZ. ISSN 0080-4630.

Milton:1982:NBE

[MPT82] Graeme W. Milton and N. Phan-Thien. New bounds on effective elastic moduli of two-component materials. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 380(1779):305–331, 1982. CODEN PRLAAZ. ISSN 0080-4630.

Milton:2000:BCN

[MS00] Graeme W. Milton and Sergey K. Serkov. Bounding the current in nonlinear conducting composites. *Journal of the Mechanics and Physics of Solids*, 48(6–7):1295–1324, June 1, 2000. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509699000836`. The J. R. Willis 60th anniversary volume.

Milton:2001:NCI

[MS01] Graeme W. Milton and Sergey K. Serkov. Neutral coated inclusions in conductivity and anti-plane elasticity. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 457(2012):1973–1997, July 8, 2001. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/457/2012/1973`.

Milton:2002:CMM

[MS02] Graeme W. Milton and Knut Sølna. Can mixing materials make electromagnetic signals travel faster? *SIAM Journal on Applied Mathematics*, 62(6):2064–2091 (electronic), 2002. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/38508`.

Milton:2007:RRM

[MS07] Graeme W. Milton and Pierre Seppecher. Realizable response matrices of multiterminal electrical, acoustic, and elastodynamic networks at a given frequency. *arXiv.org*, ??(??):??, December 7, 2007. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/0712.1066`.

Milton:2008:EC

[MS08a] Graeme W. Milton and Pierre Seppecher. Electromagnetic circuits. *arXiv.org*, ??(??):??, May 8, 2008. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/0805.1079`.

Milton:2008:RRM

[MS08b] Graeme W. Milton and Pierre Seppecher. Realizable response matrices of multi-terminal electrical, acoustic and elastodynamic networks at a given frequency. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 464(2092):967–986, April 2008. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/464/2092/967`.

Milton:2009:HEC

[MS09] Graeme W. Milton and Pierre Seppecher. Hybrid electromagnetic circuits. *arXiv.org*, ??(??):??, October 5, 2009. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/0910.0798`.

Milton:2010:EC

[MS10a] Graeme W. Milton and Pierre Seppecher. Electromagnetic circuits. *Networks and Heterogeneous Media (NHM)*, 5(2):335–360, June 2010. CODEN ???? ISSN 1556-1801 (print), 1556-181X (electronic). URL `http://aimsciences.org/journals/redirecting.jsp?paperID=5217`.

Milton:2010:HEC

[MS10b] Graeme W. Milton and Pierre Seppecher. Hybrid electromagnetic circuits. *Physica. B, Condensed Matter*, 405(14):2935–2937, July

15, 2010. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0921452610000098`.

Milton:2011:MHF

[MS11] Graeme Milton and Pierre Seppecher. A metamaterial having a frequency dependent elasticity tensor and a zero effective mass density. *arXiv.org*, ??(??):??, May 4, 2011. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1105.0941`.

Milton:2008:MVP

[MSB08] Graeme W. Milton, Pierre Seppecher, and Guy Bouchitte. Minimization variational principles for acoustics, elastodynamics, and electromagnetism in lossy inhomogeneous bodies at fixed frequency. *arXiv.org*, ??(??):??, July 8, 2008. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/0807.1336`. Published in Proc. R. Soc. A 465 (2009) 367-396.

Milton:2009:MVP

[MSB09] Graeme W. Milton, Pierre Seppecher, and Guy Bouchitté. Minimization variational principles for acoustics, elastodynamics and electromagnetism in lossy inhomogeneous bodies at fixed frequency. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 465(2102):367–396, February 8, 2009. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/465/2102/367`.

Milton:2003:RAS

[MSM03] Graeme W. Milton, S. K. Serkov, and A. B. Movchan. Realizable (average stress, average strain) pairs in a plate with holes. *SIAM Journal on Applied Mathematics*, 63(3):987–1028, 2003. CODEN SMJMAP. ISSN 0036-1399 (print), 1095-712X (electronic). URL `http://epubs.siam.org/sam-bin/dbq/article/39571`.

Moulinec:2017:CIM

[MSM17] Hervé Moulinec, Pierre Suquet, and Graeme W. Milton. Convergence of iterative methods based on Neumann series for composite materials: theory and practice. *arXiv.org*, ??(??):??, November 16, 2017. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1711.05880`.

Moulinec:2018:CIM

[MSM18] Hervé Moulinec, Pierre Suquet, and Graeme W. Milton. Convergence of iterative methods based on Neumann series for composite materials: theory and practice. *International Journal for Numerical Methods in Engineering*, 114(10):1103–1130, 2018. CODEN IJNMBH. ISSN 0029-5981 (print), 1097-0207 (electronic).

Milton:2013:BVI

[MT13] Graeme W. Milton and A. E. Thaler. Bounds on the volume of an inclusion in a body from a complex conductivity measurement. *arXiv.org*, ??(??):??, ???? 2013. ISSN 2331-8422. URL `https://arxiv.org/abs/1306.6608`.

Milton:2007:MNS

[MW07] Graeme W. Milton and John R. Willis. On modifications of Newton's second law and linear continuum elastodynamics. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 463(2079):855–880, March 2007. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/463/2079/855`.

Milton:2010:MVPa

[MW10a] Graeme W. Milton and John R. Willis. Minimum variational principles for time-harmonic waves in a dissipative medium and associated variational principles of Hashin–Shtrikman type. *arXiv.org*, ??(??):??, January 15, 2010. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1001.2773`.

Milton:2010:MVPb

[MW10b] Graeme W. Milton and John R. Willis. Minimum variational principles for time-harmonic waves in a dissipative medium and associated variational principles of Hashin–Shtrikman type. *Proceedings of the Royal Society A: Mathematical, Physical, & Engineering Sciences*, 466(2122):3013–3032, 2010. CODEN PRLAAZ. ISSN 1364-5021 (print), 1471-2946 (electronic). URL `http://rspa.royalsocietypublishing.org/content/early/2010/04/15/rspa.2010.0006`.

Nesi:1998:FPS

[Nes98] V. Nesi. Fine properties of solutions to conductivity equations with applications to composites. In Kenneth M. Golden, G. R.

Grimmett, R. D. James, Graeme W. Milton, and P. N. Sen, editors, *Mathematics of Multiscale Materials*, volume 99 of *IMA Volumes in Mathematics and its Applications*, pages 179–208. Springer-Verlag, Berlin / Heidelberg / London / etc., 1998. ISBN 0-387-98528-X. LCCN TA405 .M395 1998.

Nesi:1991:PCM

[NM91] Vincenzo Nesi and Graeme W. Milton. Polycrystalline configurations that maximize electrical resistivity. *Journal of the Mechanics and Physics of Solids*, 39(4):525–542, 1991. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/002250969190039Q`.

Nicorovici:1993:TPT

[NMM93] N. A. Nicorovici, Ross C. McPhedran, and Graeme W. Milton. Transport properties of a three-phase composite material: The square array of coated cylinders. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 442 (1916):599–620, September 8, 1993. CODEN PRLAAZ. ISSN 0080-4630.

Nicorovici:1994:ODP

[NMM94] N. A. Nicorovici, Ross C. McPhedran, and Graeme W. Milton. Optical and dielectric properties of partially resonant composites. *Physical Review B: Condensed Matter and Materials Physics*, 49 (12):8479–8482, March 15, 1994. CODEN PRBMDO. ISSN 1098-0121.

Nicorovici:2006:PRT

[NMMB06] N. A. Nicorovici, R. C. McPhedran, G. W. Milton, and L. C. Botten. Partial resonances of three-phase composites at long wavelengths. *arXiv.org*, ??(??):??, August 25, 2006. CODEN APRHCB. ISSN 2331-8422. URL `https://arxiv.org/abs/physics/0608247`.

Nicorovici:2007:QCT

[NMMB07] Nicolae-Alexandru P. Nicorovici, Graeme W. Milton, Ross C. McPhedran, and Lindsay C. Botten. Quasistatic cloaking of two-dimensional polarizable discrete systems by anomalous resonance. *Optics Express*, 15(10):6314–6323, May 14, 2007. CODEN OPEXFF. ISSN 1094-4087. URL `https://www.osapublishing.org/oe/abstract.cfm?uri=oe-15-10-6314`.

Podolskiy:2005:OSMa

[PKM05a] Viktor A. Podolskiy, Nicholas A. Kuhta, and Graeme W. Milton. Optimizing the Superlens: manipulating geometry to enhance the resolution. *arXiv.org*, ??(??):??, September 8, 2005. CODEN APRHCB. ISSN 2331-8422. URL `https://arxiv.org/abs/physics/0509067`. Published in Applied Physics Letters, v.87, p.231113 (2005).

Podolskiy:2005:OSMb

[PKM05b] Viktor A. Podolskiy, Nicholas A. Kuhta, and Graeme W. Milton. Optimizing the superlens: manipulating geometry to enhance the resolution. *Applied Physics Letters*, 87(23):231113, December 5, 2005. CODEN APPLAB. ISSN 0003-6951 (print), 1077-3118 (electronic), 1520-8842. URL `http://scitation.aip.org/content/aip/journal/apl/87/23/10.1063/1.2139620`.

Podolskiy:2006:OSG

[PKM06] Viktor A. Podolskiy, Nicholas A. Kuhta, and Graeme W. Milton. Optimizing the superlens geometry. In Anonymous, editor, *CLEO/QELS 06: PhAST: Conference on Lasers and Electro-optics: Quantum Electronics and Laser Science Conference: Conference on Photonic Applications, Systems and Technologies: technical digest CD-ROM, Long Beach Convention Center, Long Beach, California, USA, CLEO/QELS Conference: May 21-26, 2006: PhAST Conference, May 22-25, 2006.: Lasers and Electro-optics and 2006 Quantum Electronics and Laser Science Conference, CLEO*, page ?? IEEE Computer Society Press, 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, ???? 2006. ISBN 1-55752-813-6. LCCN TA1673 .C63 2006. URL `http://www.osapublishing.org/abstract.cfm?uri=QELS-2006-JWB84`.

Phan-Thien:1982:NBE

[PTM82a] N. Phan-Thien and Graeme W. Milton. New bounds on the effective thermal conductivity of N-phase materials. *Proceedings of the Royal Society of London. Series A, Mathematical and physical sciences*, 380(1779):333–348, 1982. CODEN PRLAAZ. ISSN 0080-4630.

Phan-Thien:1982:PUB

[PTM82b] N. Phan-Thien and Graeme W. Milton. A possible use of bounds on effective moduli of composites. *Journal of Reinforced Plastics and Composites*, 1(2):107–114, April 1982. CODEN JRPCDW.

ISSN 0731-6844 (print), 1530-7964 (electronic). URL `http://jrp.sagepub.com/content/1/2/107.abstract`.

Phan-Thien:1983:NTO

[PTM83] N. Phan-Thien and Graeme W. Milton. New third-order bounds on the effective moduli of N-phase composites. *Quarterly of Applied Mathematics*, 41(1):59–74, 1983. CODEN QAMAAY. ISSN 0033-569X (print), 1552-4485 (electronic).

Sharma:2017:BRE

[Sha17] Pradeep Sharma. Book review: *Extending the Theory of Composites to Other Areas of Science*, edited by Graeme W. Milton. *Journal of Applied Mechanics*, 84(3):036501–1, January 25, 2017. CODEN JAMCAV. ISSN 0021-8936 (print), 1528-9036 (electronic). URL `http://appliedmechanics.asmedigitalcollection.asme.org/article.aspx?articleid=2594947`.

Sevostianov:2009:ECC

[SK09] Igor Sevostianov and Mark Kachanov. Elasticity-conductivity connections for contacting rough surfaces: An overview. *Mechanics of Materials: An International Journal*, 41(4):375–384, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000076`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Smereka:1991:BFR

[SM91] Peter Smereka and Graeme W. Milton. Bubbly flow and its relation to conduction in composites. *Journal of Fluid Mechanics*, 233:65–81, December 1991. CODEN JFLSA7. ISSN 0022-1120 (print), 1469-7645 (electronic). URL `http://journals.cambridge.org/abstract_S0022112091000393`.

Suquet:1999:NSE

[SM99] Pierre M. Suquet and H. Moulinec. Numerical simulation of the effective elastic properties of a class of cell materials. In Kenneth M. Golden, G. R. Grimmett, R. D. James, Graeme W. Milton, and P. N. Sen, editors, *Mathematics of Multiscale Materials*, volume 99 of *The IMA Volumes in Mathematics and its Applications*, pages 271–280. Springer-Verlag, Berlin / Heidelberg / London / etc., 1999. ISBN 0-387-98528-X. LCCN TA405.M395 1998.

Solna:2000:BGV

[SM00] Knut Sølna and Graeme W. Milton. Bounds for the group velocity of electromagnetic signals in two phase materials. *Physica. B, Condensed Matter*, 279(1–3):9–12, April 2000. CODEN PHYBE3. ISSN 0921-4526 (print), 1873-2135 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0921452699006547`.

Stroud:1986:AMD

[SMD86] D. Stroud, Graeme W. Milton, and B. R. De. Analytical model for the dielectric response of brine-saturated rocks. *Physical Review B: Condensed Matter and Materials Physics*, 34(8):5145–5153, October 15, 1986. CODEN PRBMDO. ISSN 1098-0121. URL `http://link.aps.org/doi/10.1103/PhysRevB.34.5145`.

Smyshlyaev:2009:PLE

[Smy09] Valery P. Smyshlyaev. Propagation and localization of elastic waves in highly anisotropic periodic composites via two-scale homogenization. *Mechanics of Materials: An International Journal*, 41(4):434–447, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000088`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.

Tartar:1989:MSA

[Tar89] Luc Tartar. H-measures and small amplitude homogenization. In Robert V. Kohn and Graeme W. Milton, editors, *Proceedings of the SIAM Workshop on Random Media and Composites, Leesburg, Virginia, December 7–10, 1988*, pages 89–99. SIAM Press, Philadelphia, 1989. ISBN 0-89871-246-7. LCCN TA401.3 .S53 1988.

Thaler:2013:BVI

[TM13] Andrew E. Thaler and Graeme W. Milton. Bounds on the volume of an inclusion in a body from a complex conductivity measurement. *arXiv.org*, ??(??):??, June 27, 2013. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1306.6608`. Published in Communications in Mathematical Sciences 13(4): 863–892, 2015.

Thaler:2014:EDVa

[TM14a] Andrew E. Thaler and Graeme W. Milton. Exact determination of the volume of an inclusion in a body having constant shear modulus. *arXiv.org*, ??(??):??, June 25, 2014. CODEN ???? ISSN 2331-8422. URL `https://arxiv.org/abs/1406.6656`. Published in Inverse Problems 30 (2014) 1250008.

Thaler:2014:EDVb

[TM14b] Andrew E. Thaler and Graeme W. Milton. Exact determination of the volume of an inclusion in a body having constant shear modulus. *Inverse Problems*, 30(12):125008, 16, December 2014. CODEN INPEEY. ISSN 0266-5611 (print), 1361-6420 (electronic). URL `http://iopscience.iop.org/0266-5611/30/12/125008`.

Thaler:2015:BVI

[TM15] Andrew E. Thaler and Graeme W. Milton. Bounds on the volume of an inclusion in a body from a complex conductivity measurement. *Communications in Mathematical Sciences*, 13(4):863–892, 2015. CODEN ???? ISSN 1539-6746 (print), 1945-0796 (electronic).

Vinogradov:2004:BCC

[VM04] Vladimir Vinogradov and Graeme W. Milton. Bounds on the creep of composites under hydrostatic loading. In J. S. Yang, editor, *The 41st annual technical meeting of the Society of Engineering Science (SES-2004) held at the Cornhusker Hotel in downtown Lincoln, Nebraska during October 10–13, 2004*, International journal of applied electromagnetics and mechanics, page ?? IOS Press, Amsterdam, The Netherlands, 2004. ISBN ???? ISSN 1383-5416 (print), 1875-8800 (electronic). LCCN ???? URL `https://ses.confex.com/ses/2004tm/techprogram/P1085.HTM`.

Vinogradov:2005:TCV

[VM05] V. Vinogradov and Graeme W. Milton. The total creep of viscoelastic composites under hydrostatic or antiplane loading. *Journal of the Mechanics and Physics of Solids*, 53(6):1248–1279, June 2005. CODEN JMPSA8. ISSN 0022-5096 (print), 1873-4782 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0022509605000244`.

Vinogradov:2008:AFA

[VM08] V. Vinogradov and Graeme W. Milton. An accelerated FFT algorithm for thermoelastic and non-linear composites. *International*

Journal for Numerical Methods in Engineering, 76(11):1678–1695, 2008. CODEN IJNMBH. ISSN 0029-5981 (print), 1097-0207 (electronic).

Willis:2009:EER

[Wil09] John R. Willis. Exact effective relations for dynamics of a laminated body. *Mechanics of Materials: An International Journal*, 41(4):385–393, April 2009. CODEN MSMSD3. ISSN 0167-6636 (print), 1872-7743 (electronic). URL `http://www.sciencedirect.com/science/article/pii/S0167663609000118`. Special Issue in Honor of Graeme W. Milton, 2007 Winner of the William Prager Medal of the Society of Engineering Science.