Bibliography

[ABDF11]   M. V. Afonso, J. M. Bioucas-Dias, and M. A. T. Figueiredo, *An augmented Lagrangian approach to the constrained optimization formulation of imaging inverse problems*, IEEE Trans. Image Process. **20** (2011), no. 3, 681–695.

[AT06]   A. Auslender and M. Teboulle, *Interior gradient and proximal methods for convex and conic optimization*, SIAM J. Optim. **16** (2006), no. 3, 697–725.

[Auj09]   J.-F. Aujol, *Some first-order algorithms for total-variation based image restoration*, J. Math. Imaging Vision **34** (2009), no. 3, 307–327.

[Bar07]   R. Baraniuk, *Compressive sensing*, IEEE Sig. Proc. Mag. **24** (2007), no. 4, 118–121.

[BB88]   J. Barzilai and J. Borwein, *Two point step size gradient method*, IMA J. Numer. Anal. **8** (1988), 141–148.

[BBC11]   S. Becker, J. Bobin, and E. J. Candès, *NESTA: a fast and accurate first-order method for sparse recovery*, SIAM J. Imaging Sci. **4** (2011), no. 1, 1–39.

[BC09]   J. Bobin and E. J. Candès, *A fast and accurate first-order algorithm for compressed sensing*, Proc. IEEE ICIP (2009), 1457–1460.

[BC11]   H. H. Bauschke and P. L. Combettes, *Convex analysis and monotone operator theory in hilbert spaces*, Springer-Verlag, New York, 2011.

[BCDH10]   R. G. Baraniuk, V. Cevher, M. F. Duarte, and C. Hegde, *Model-based compressive sensing*, IEEE Trans. Info. Theory **56** (2010), no. 4, 1982–2001.

[BCG10a]   S. Becker, E. J. Candès, and M. Grant, *Templates for convex cone problems with applications to sparse signal recovery*, Tech. Report 1009.2065, arXiv, 2010.

[BCG10b]   _____, *Templates for first-order conic solvers user guide*, Tech. report, Stanford, 2010, Preprint available at `http://tfocs.stanford.edu`.

[BD09]   T. Blumensath and M. E. Davies, *Iterative hard thresholding for compressed sensing*, Harm. Anal. **27** (2009), no. 3, 265–274.

[BDDW08] R. Baraniuk, M. Davenport, R. DeVore, and M. Wakin, *A simple proof of the restricted isometry property for random matrices*, Constructive Approximation **28** (2008), no. 3, 253–263.

[BDF07] J. M. Bioucas-Dias and M. A. T. Figueiredo, *A new TwIST: two-step iterative shrinkage/thresholding algorithms for image restoration*, IEEE Trans. Image Process. **16** (2007), no. 12, 2992–3004.

[Ber75] D. P. Bertsekas, *Necessary and sufficient conditions for a penalty method to be exact*, Math. Program. **9** (1975), 87–99.

[BGI⁺08] R. Berinde, A. Gilbert, P. Indyk, H. Karloff, and M. Strauss, *Combining geometry and combinatorics: a unified approach to sparse signal recovery*, Allerton, 2008.

[BKR09] P. T. Boufounos, G. Kutyniok, and H. Rauhut, *Sparse recovery from combined fusion frame measurements*, IEEE Tran. Info. Theory, *to appear* (2009).

[BLN95] R. H. Byrd, P. Lu, and J. Nocedal, *A limited memory algorithm for bound constrained optimization*, SIAM J. Sci. Stat. Comp. **16** (1995), no. 5, 1190–1208.

[Blu11] T. Blumensath, *Compressed sensing with nonlinear observation*, IEEE Trans. Info. Theory, *under review* (2011), Available at `http://www.personal.soton.ac.uk/tb1m08/papers/B_Nonlinear.pdf`.

[BM90] N. M. Blachman and H. Mousavinezhad, *The spectrum of the square of a synchronous random pulse train*, IEEE Trans. on Comm. **38** (Jan 1990), no. 1.

[BM03] S. Burer and R.D.C. Monteiro, *A nonlinear programming algorithm for solving semidefinite programs via low-rank factorization*, Math. Prog. (series B) **95** (2003), no. 2, 329–357.

[BM05] _____, *Local minima and convergence in low-rank semidefinite programming*, Math. Prog. (series A) **103** (2005), no. 3, 427–444.

[BMR00] G. Birgin, J. M. Martinez, and M. Raydan, *Nonmonotone spectral projected gradient methods on convex sets*, SIAM J. Optim. **10** (2000), 1196–1211.

[BNO03] D. P. Bertsekas, A. Nedić, and A. E. Ozdaglar, *Convex analysis and optimization*, Athena Scientific, 2003.

[BPC⁺10] S. Boyd, N. Parikh, E. Chu, B. Peleato, and J. Eckstein, *Distributed optimization and statistical learning via the alternating direction method of multipliers*, 2010, Available at `http://www.stanford.edu/~boyd/papers/admm_distr_stats.html`.

[Bre95]   L. Breiman, *Better subset regression using the nonnegative garotte*, Technometrics **37** (1995), 373–384.

[BS07]   H. Y. Benson and D. F. Shanno, *An exact primal-dual penalty method approach to warmstarting interior-point methods for linear programming*, Comp. Opt. Appl. **38** (2007), 371–399.

[BSB10]   D. Baron, S. Sarvotham, and R. Baraniuk, *Bayesian compressive sensing via belief propagation*, IEEE Trans. Sign. Proc. **58** (2010), no. 1, 269–280.

[BSI09]   BSIM Research Group, UC Berkeley, *BSIM4*, 2009, Available at `http://www-device.eecs.berkeley.edu/~bsim3/bsim4_intro.html`.

[BSO08]   J. Bobin, J.-L. Starck, and R. Ottensamer, *Compressed sensing in astronomy*, IEEE J. Sel. Top. Signal Process. **2** (2008), no. 5, 718–726.

[BT09]   A. Beck and M. Teboulle, *A fast iterative shrinkage-thresholding algorithm for linear inverse problems*, SIAM J. on Imaging Sci. **2** (2009), no. 1, 183–202.

[BT10]   ———, *Gradient-based algorithms with applications in signal recovery problems*, Convex Optimization in Signal Processing and Communications (D. Palomar and Y. Eldar, eds.), Cambridge University Press, 2010.

[BV04]   S. Boyd and L. Vandenberghe, *Convex optimization*, Cambridge University Press, 2004.

[Can06]   E. J. Candès, *Compressive sampling*, Int. Cong. Math. **3** (2006), 1433–1452.

[Can08]   ———, *The restricted isometry property and its implications for compressed sensing*, Compte Rendus de l'Academie des Sciences, Paris, Serie I **346** (2008), 589–592.

[CCS10]   J-F. Cai, E. J. Candès, and Z. Shen, *A singular value thresholding algorithm for matrix completion*, SIAM J. Optim. **20** (2010), 1956–1982.

[CDDY06] E. J. Candès, L. Demanet, D. Donoho, and L. Ying, *Fast discrete curvelet transforms*, SIAM Multiscale Model. Simul. **5/3** (2006), 861–899.

[CDS98]   S. S. Chen, D. L. Donoho, and M. A. Saunders, *Atomic decomposition by basis pursuit*, SIAM J. Sci. Comput. **20** (1998), 33–61.

[CDV10]   P. L. Combettes, D. Dũng, and B. C. Vũ, *Dualization of signal recovery problems*, Set-Valued and Variational Analysis **18** (2010), 373–404.

[CENR11] E. J. Candès, Y. C. Eldar, D. Needell, and P. Randall, *Compressed sensing with coherent and redundant dictionaries*, Appl. Comp. Harm. Anal., *to appear* (2011).

[Cev09]   V. Cevher, *Learning with compressible priors*, NIPS, 2009.

[CG02]   E. J. Candès and F. Guo, *New multiscale transforms, minimum total-variation synthesis: applications to edge-preserving image reconstruction*, Signal Processing **82** (2002), no. 11, 1519–1543.

[CGM01]   R. Coifman, F. Geshwind, and Y Meyer, *Noiselets*, Appl. Comput. Harmon. Anal. **10** (2001), no. 1, 27–44.

[Cha04]   A. Chambolle, *An algorithm for total-variation minimization and applications*, J. Math. Imaging Vision **20** (2004), no. 1–2, 89–97.

[Cha07]   R. Chartrand, *Exact reconstruction of sparse signals via nonconvex minimization*, IEEE Signal Process. Lett. **14** (2007), no. 10, 707–710.

[Cha08]   V. Chandar, *A negative result concerning explicit matrices with the restricted isometry property*, Tech. report, Rice DSP website, 2008, Available at `http://dsp.rice.edu/cs`.

[Chr09]   S. Chretien, *The two stage l_1 approach to the compressed sensing problem*, Tech. Report 0906.0593, arXiv, June 2009.

[Cia89]   P. G. Ciarlet, *Introduction to numerical linear algebra and optimisation*, Cambridge University Press, 1989.

[CLMW09]   E. J. Candès, X. Li, Y. Ma, and J. Wright, *Robust principal component analysis?*, Preprint: arXiv:0912.3599 (2009).

[CM73]   J. F. Claerbout and F. Muir, *Robust modeling with erratic data*, Geophysics **38** (1973), no. 5, 826–844.

[CMA09]   S. Chehrazi, A. Mirzaei, and A. Abidi, *Second-order intermodulation in current-commutating passive FET mixers*, IEEE Trans. Circ. Sys.-I **56** (2009), no. 12.

[Com04]   P. L. Combettes, *Solving monotone inclusions via compositions of nonexpansive averaged operators*, Optimization **53** (2004), no. 5–6, 475–504.

[Cor09]   T. J. Cornwell, *Högbom's CLEAN algorithm: impact on astronomy and beyond*, Astronomy & Astrophysics **500** (2009), no. 1, 65–66.

[COS09]   J.-F. Cai, S. Osher, and Z. Shen, *Convergence of the linearized Bregman iterations for l1-norm minimization*, Math. Comp. **78** (2009), 2127–2136.

[CP07a]   E. J. Candès and Y. Plan, *Near-ideal model selection by ℓ_1 minimization*, Ann. Statist. **37** (2007), no. 5A, 2145–2177.

[CP07b]   P. L. Combettes and J.-C. Pesquet, *A Douglas-Rachford splitting approach to non-smooth convex variational signal recovery*, IEEE J. Sel. Topics Signal Processing **1** (2007), no. 4, 564–574.

[CP08]   P. L. Combettes and J. C. Pesquet, *A proximal decomposition method for solving convex variational inverse problems*, Inverse Problems **24** (2008), no. 6.

[CP10a]   E. J. Candès and Y. Plan, *A probabilistic and RIPless theory of compressed sensing*, Preprint: arXiv:1011.3854 (2010).

[CP10b]   E. J. Candès and Y. Plan, *Tight oracle bounds for low-rank matrix recovery from a minimal number of random measurements*, CoRR **abs/1001.0339** (2010).

[CP10c]   A. Chambolle and T. Pock, *A first-order primal-dual algorithm for convex problems with applications to imaging*, J. Math. Imaging Vision **40** (2010), no. 1, 120–145.

[CR05]   E. J. Candès and J. K. Romberg, *Practical signal recovery from random projections*, SPIE Conference on Computational Imaging, 2005, pp. 76–86.

[CR07a]   E. J. Candès and J. Romberg, *Sparsity and incoherence in compressive sampling*, Inverse Prob. **23** (2007), no. 3, 969–985.

[CR07b]   E. J. Candès and J. K. Romberg, ℓ_1-*magic*, Tech. report, Caltech, 2007.

[CR09]   E. J. Candès and B. Recht, *Exact matrix completion via convex optimization*, Foundations of Computational Mathematics **9** (2009), no. 6, 717–772.

[CRT06]   E. J. Candès, J. Romberg, and T. Tao, *Robust uncertainty principles: Exact signal reconstruction from highly incomplete frequency information*, IEEE Trans. Inform. Theory **52** (2006), no. 2, 489–509.

[CT06]   E. J. Candès and T. Tao, *Near optimal signal recovery from random projections: Universal encoding strategies?*, IEEE Trans. Inform. Theory **52** (2006), no. 12, 5406–5425.

[CT07a]   E. J. Candès and T. Tao, *The Dantzig selector: statistical estimation when p is much larger than n*, Ann. Statist. **35** (2007), no. 6, 2313–2351.

[CT07b]   E. J. Candès and T. Tao, *Rejoinder: The Dantzig selector: Statistical estimation when p is much larger than n*, Ann. Stat. **35** (2007), no. 6, 2392–2404.

[CT10]   E. J. Candès and T. Tao, *The power of convex relaxation: Near-optimal matrix completion*, IEEE Trans. Inform. Theory **56** (2010), no. 5, 2053–2080.

[CW05]   P. L. Combettes and V. R. Wajs, *Signal recovery by proximal forward-backward splitting*, SIAM Multiscale Model. Simul. **4** (2005), no. 4, 1168–1200.

[CW08]   E. J. Candès and M. Wakin, *An introduction to compressive sampling*, IEEE Sig. Proc. Mag. **25** (2008), no. 2, 21–30.

[CWB08]   E. J. Candès, M. B. Wakin, and S. P. Boyd, *Enhancing sparsity by reweighted ℓ_1 minimization*, J. Fourier Anal. Appl. **14** (2008), no. 5–6, 877–905.

[CY08]   R. Chartrand and W. Yin, *Iteratively reweighted algorithms for compressive sensing*, Proc. Int. Conf. Acoustics, Speech, Signal Processing (ICASSP), 2008, pp. 3869–3872.

[CYH+11]   Xi Chen, Z. Yu, S. Hoyos, B. M. Sadler, and J. Silva-Martinez, *A sub-Nyquist rate sampling receiver exploiting compressive sensing*, IEEE Trans. Circuits and Systems I: Regular Papers **58** (2011), no. 3, 507–520.

[DB10]   M. F. Duarte and R. G. Baraniuk, *Spectral compressive sensing*, IEEE Trans. Sig. Proc., *submitted.*, (2010).

[DBMS84]   J. Dongarra, J. Bunch, C. Moler, and G. Stewart, *LINPACK*, netlib, 1984.

[DDFG10]   I. Daubechies, R. DeVore, M. Fornasier, and C. S. Gunturk, *Iteratively re-weighted least squares minimization for sparse recovery*, Comm. Pure Appl. Math. **63** (2010), no. 1.

[DDM04]   I. Daubechies, M. Defrise, and C. De Mol, *An iterative thresholding algorithm for linear inverse problems with a sparsity constraint*, Comm. Pure Appl. Math. **57** (2004), no. 11, 1413–1457.

[DDW+07]   M. A. Davenport, M. F. Duarte, M. B. Wakin, J. N. Laska, D. Takhar, K. F. Kelly, and R. G. Baraniuk, *The smashed filter for compressive classification and target recognition*, Proc. Comp. Imag. V at SPIE Elect. Imag. (San Jose), 2007.

[DE03]   D. L. Donoho and M. Elad, *Optimally sparse representation in general (non-orthogonal) dictionaries via ℓ^1 minimization*, Proc. Nat. Aca. Sci. **100** (2003), 2197–2202.

[DET06]   D. L. Donoho, M. Elad, and V Temlyakov, *Stable recovery of sparse overcomplete representations in the presence of noise*, IEEE Trans. Inform. Theory **52** (2006), 6–18.

[DFL08]   I. Daubechies, M. Fornasier, and I. Loris, *Accelerated projected gradient method for linear inverse problems with sparsity constraints*, J. Fourier Anal. Appl. **14** (2008), 764–792.

[DH93]   D.-Z. Du and F. K. Hwang, *Combinatorial group testing and its applications*, World Scientific, Singapore, 1993.

[DH01]   D. L. Donoho and X. Huo, *Uncertainty principles and ideal atomic decomposition*, IEEE Trans. Info. Theory **47** (2001), 2845–2862.

[DHJJ10]   J. Dahl, C. Hansen, S. H. Jensen, and T. L. Jensen, *Algorithms and software for total variation image reconstruction via first-order methods*, Numer. Algorithms **53** (2010), no. 1.

[DJ94]   D. L. Donoho and I. M. Johnstone, *Ideal spatial adaptation by wavelet shrinkage*, Biometrika **81** (1994), no. 3, 425–455.

[DL92]   D. L. Donoho and B. F. Logan, *Signal recovery and the large sieve*, SIAM J. Appl. Math **52** (1992), no. 2, 577–592.

[DLR77]   A. P. Dempster, N. M. Laird, and D. B. Rubin, *Maximum likelihood from incomplete data via the em algorithm*, J. Roy. Statist. Soc., Ser. B **39** (1977), no. 1, 1–38.

[DMM09]   D. L. Donoho, A. Maliki, and A. Montanari, *Message-passing algorithms for compressed sensing*, Proc. Nat. Acad. Sci. **106** (2009), no. 45, 18914–18919.

[DMR$^+$09]   D. L. Donoho, A. Maleki, I. Rahman, M. Shahram, and V. Stodden, *Reproducible research in computational harmonic analysis*, Computing in Sciences and Engineering **11** (2009), no. 1, 8–18.

[Don06]   D. L. Donoho, *Compressed sensing*, IEEE Trans. Inform. Theory **52** (April 2006), no. 4, 1289–1306.

[DS89]   D. L. Donoho and P. B. Stark, *Uncertainty principles and signal recovery*, SIAM J. Appl. Math **49** (1989), no. 3, 906–931.

[DS05]   J. Darbon and M. Sigelle, *A fast and exact algorithm for total-variation minimization*, IbPRIA **3522** (2005), 351–359.

[DT08]   D. L. Donoho and Y. Tsaig, *Fast solution of ℓ_1 minimization problems when the solution may be sparse*, IEEE Trans. Inform. Theory **54** (2008), no. 11, 4789–4812.

[DT10]   D. L. Donoho and J. Tanner, *Precise undersampling theorems*, Proc. IEEE **98** (2010), no. 6, 913–924.

[DTDS06]   D. L. Donoho, Y. Tsaig, I. Drori, and J.-L. Starck, *Sparse solution of underdetermined linear equations by stagewise orthogonal matching pursuit*, IEEE Trans. Inform. Theory (2006), submitted.

[DV10]   J. Dahl and L. Vandenberghe, *CVXOPT, Python software for convex optimization, version 1.13*, UCLA, 2010, Available at `http://abel.ee.ucla.edu/cvxopt`.

[DW10]   M. A. Davenport and M. B. Wakin, *Analysis of orthogonal matching pursuit using the restricted isometry property*, IEEE Trans. Info. Theory **56** (2010), no. 9, 4395–4401.

[DWB08]   M. F. Duarte, M. B. Wakin, and R. G. Baraniuk, *Wavelet-domain compressive signal reconstruction using a hidden Markov tree model*, ICASSP, 2008.

[EB02]   M. Elad and A. M. Bruckstein, *A generalized uncertainty principle and sparse representation in pairs of bases*, IEEE Trans. Info. Theory **48** (2002), 2558–2567.

[EHJT04]   B. Efron, T. Hastie, I. Johnstone, and R. Tibshirani, *Least angle regression*, Ann. Statist. **32** (2004), no. 2, 407–499.

[EHT07]   B. Efron, T. Hastie, and R. Tibshirani, *Discussion: The Dantzig selector: Statistical estimation when p is much larger than n*, Ann. Stat. **35** (2007), no. 6, 2358–2364.

[Eld09]   Y. C. Eldar, *Compressed sensing of analog signals in shift-invariant spaces*, IEEE Trans. Sig. Proc. **57** (2009), no. 8, 2986–2997.

[Ell10]   J. Ellenberg, *Fill in the blanks: Using math to turn lo-res datasets into hi-res samples*, Wired Magazine (2010), `http://www.wired.com/magazine/2010/02/ff_algorithm/`.

[EMR07]   M. Elad, P. Milanfar, and R. Rubinstein, *Analysis versus synthesis in signal priors*, Inverse Problems **23** (2007), 947–968.

[EMZ07]   M. Elad, B. Matalon, and M. Zibulevsky, *Coordinate and subspace optimization methods for linear least squares with non-quadratic regularization*, Appl. Comput. Harmon. Anal **23** (2007), 346–367.

[ERW11]   A. Eftekhari, J. Romberg, and M. B. Wakin, *Matched filtering from limited frequency samples*, Tech. Report 1101.2713, arXiv, 2011.

[Faz02]   M. Fazel, *Matrix rank minimization with applications*, Ph.D. thesis, Stanford University, 2002.

[FBC$^+$08]   G. L. Fudge, R. E. Bland, M. A. Chivers, S. Ravindran, J. Haupt, and P. E. Pace, *A Nyquist folding analog-to-information receiver*, Signals, Systems and Computers, 2008 42nd Asilomar Conference on (Pacific Grove, CA), Oct. 2008, pp. 541–545.

[FHT10]   J. Friedman, T. Hastie, and R. Tibshirani, *Regularization paths for generalized linear models via coordinate descent*, J. Stat. Software **33** (2010), no. 1.

[FM81]   M. Fukushima and H. Mine, *A generalized proximal point algorithm for certain nonconvex minimization problems*, Int. J. Systems Science **12** (1981), no. 8, 989–1000.

[FN03]   M. A. T. Figueiredo and R.D. Nowak, *An EM algorithm for wavelet-based image restoration*, IEEE Trans. Image Process. **12** (2003), no. 8, 906–916.

[FNW07]   M. A. T. Figueiredo, R. Nowak, and S. J. Wright, *Gradient projection for sparse re-construction: Application to compressed sensing and other inverse problems*, IEEE J. Sel. Top. Signal Process. **1** (2007), no. 4, 586–597.

[FP11]   J.M. Fadili and G. Peyré, *Total variation projection with first order schemes*, IEEE Trans. Image Proc. **20** (2011), no. 3, 657–669.

[FR11]   M. Fornasier and H. Rauhut, *Handbook of mathematical methods in imaging*, ch. Compressive Sensing, Springer, 2011.

[FS09]   M.J. Fadili and J-L. Starck, *Monotone operator splitting for optimization problems in sparse recovery*, IEEE ICIP (Cairo), 2009.

[FT07]   M. P. Friedlander and P. Tseng, *Exact regularization of convex programs*, SIAM J. Optim. **18** (2007), no. 4, 1326–1350.

[Gẅ92]   O. Güler, *New proximal point algorithms for convex minimization*, SIAM J. Optim. **2** (1992), no. 4, 649–664.

[GB10]   M. Grant and S. Boyd, *CVX: Matlab software for disciplined convex programming, version 1.21*, 2010, Available at `http://cvxr.com/cvx`.

[GG03]   J. Gondzio and A. Grothey, *Reoptimization with the primal-dual interior point method*, SIAM J. Opt. **13** (2003), 842–864.

[GGB95]   I. Gorodnitsky, J. S. George, and D. R. Bhaskar, *Neuromagnetic source imaging with focuss: a recursive weighted minimum norm algorithm*, Electroencephalography and Clinical Neurophysiology **95** (1995), 231–251.

[GLF+10]   D. Gross, Y.-K. Liu, S. T. Flammia, S. Becker, and J. Eisert, *Quantum state tomography via compressed sensing*, Phys. Rev. Lett. **105** (2010), no. 15, 150401.

[GLW09]   M. Gu, L.-H. Lim, and C. J. Wu, *PARNES: A rapidly convergent algorithm for accurate recovery of sparse and approximately sparse signals*, Tech. report, U.C. Berkeley, 2009, Preprint available at `http://arxiv.org/abs/0911.0492`.

[GM10]   D. Goldfarb and S. Ma, *Fast multiple splitting algorithms for convex optimization*, SIAM J. Optimization, *under revision* (2010).

[GMS10]   D. Goldfarb, S. Ma, and K. Scheinberg, *Fast alternating linearization methods for minimizing the sum of two convex functions*, Math. Prog. (Series A), *submitted* (2010).

[GN03]   R. Gribonval and M. Nielsen, *Sparse representations in unions of bases*, IEEE Trans. Inform. Theory **49** (2003), 3320–3325.

[GO09]   T. Goldstein and S. Osher, *The split Bregman method for l1 regularized problems*, SIAM J. Imaging Sci. **2** (2009), no. 2, 323–343.

[Gro11]   D. Gross, *Recovering low-rank matrices from few coefficients in any basis*, IEEE Trans. Inform. Theory **57** (2011), no. 3.

[GS06a]   A. C. Gilbert and M. J. Strauss, *Group testing in statistical signal recovery*, 2006, Available at `http://www.math.lsa.umich.edu/~annacg/papers/GS06.grouptesting.pdf`.

[GS06b]   C. Greif and D. Schötzau, *Preconditioners for saddle point linear systems with highly singular (1,1) blocks*, Elec. Trans. Numer. Anal. **22** (2006), 114–121.

[GSS02]   Y. Geerts, M. Steyaert, and W. M. C. Sansen, *Design of multi-bit delta-sigma a/d converters*, Springer, 2002.

[GST08]   A. C. Gilbert, M. J. Strauss, and J. A. Tropp, *A tutorial on fast Fourier sampling*, IEEE Sig. Proc. Mag. (2008), 57–66.

[GSTV06] A. C. Gilbert, M. J. Strauss, J. A. Tropp, and R. Vershynin, *Algorithmic linear dimension reduction in the l1 norm for sparse vectors*, Proc. 44th Allerton Conf. Communication, Control, and Computing (Allerton, IL), 2006, Invited paper, special session: Compressed Sensing.

[GSTV07] A. Gilbert, M. Strauss, J. A. Tropp, and R. Vershynin, *One sketch for all: Fast algorithms for compressed sensing*, Proc. 39th ACM Symp. Theory of Computing (San Diego), 2007.

[HBC11]   A. Harmsy, W. U. Bajwa, and R. Calderbank, *Beating Nyquist through correlations: a constrained random demodulator for sampling of sparse bandlimited signals*, ICASSP (Prague), 2011.

[Hea07]   D. L. Healy, *Analog-to-Information Receiver Development Program (A-to-I)*, 2007, DARPA Broad Agency Announcement (BAA) No. 08-03. Available at `https://www.fbo.gov/spg/ODA/DARPA/CMO/BAA08-03/listing.html`.

[HH08]   G. Hennenfent and F. J. Herrmann, *Simply denoise: wavefield reconstruction via jittered undersampling*, Geophysics **73** (2008).

[HL04]   D. R. Hunter and K. Lange, *A tutorial on mm algorithms*, The American Statistician (2004), 30–37.

[HMT11]   N. Halko, P. G. Martinsson, and J. A. Tropp, *Finding structure with randomness: Stochastic algorithms for constructing approximate matrix decompositions*, SIAM Rev. (2011), to appear.

[Hög74]   J. A. Högbom, *Aperture synthesis with a non regular distribution of interferometer baselines*, Astronomy & Astrophysics Supp. **15** (1974), 417–426.

[HS09]   M. Herman and T. Strohmer, *High-resolution radar via compressed sensing*, IEEE Trans. Sig. Proc. **57** (2009), no. 6, 2275–2284.

[Hub64]   P. J. Huber, *Robust estimation of a location parameter*, Annal. Stat. **53** (1964), 73–101.

[HUL93]   J.-B. Hiriart-Urruty and C. Lemaréchal, *Convex analysis and minimization algorithms*, vol. I and II, Springer-Verlag, 1993.

[HYZ07]   E. T. Hale, W. Yin, and Y. Zhang, *A fixed-point continuation method for l1-regularized minimization with applications to compressed sensing*, Tech. Report CAAM/TR07-07, Rice University, Houston, TX, 2007.

[HYZ08]   E. T. Hale, W. Yin, and Y. Zhang, *Fixed-point continuation for ℓ_1-minimization: Methodology and convergence*, SIAM J. Optim. **19** (2008), no. 3, 1107–1130.

[HZ06]   W. W. Hager and H. Zhang, *Algorithm 851: CG_DESCENT, a conjugate gradient method with guaranteed descent*, ACM Trans. Math. Software **32** (2006), 113–137.

[JMOB10]   R. Jenatton, J. Mairal, G. Obozinski, and F. Bach, *Proximal methods for hierarchical sparse coding*, Preprint: arXiv:1009.2139 (2010).

[JRL09]   G. James, P. Radchenko, and J. Lv, *DASSO: Connections Between the Dantzig Selector and Lasso*, J. Roy. Statist. Soc., Ser. B **71** (2009), 127–142.

[JXHC09]   S. Jafarpour, W. Xu, B. Hassibi, and R. Calderbank, *Efficient and robust compressed sensing using optimized expander graphs*, IEEE Trans. Info. Theory **55** (2009), no. 9, 4299–4308.

[KKB07]   K. Koh, S. J. Kim, and S. P. Boyd, *Solver for l1-regularized least squares problems*, Tech. report, Stanford University, 2007, `http://www.stanford.edu/~boyd/l1_ls/`.

[KLW+06]   S. Kirolos, J. N. Laska, M. Wakin, M. F. Duarte, D. Baron, T. Ragheb, Y. Massoud, and R. G. Baraniuk, *Analog-to-information conversion via random demodulation*, Proc. IEEE DCAS, Sept. 2006.

[Kor76]   G. M. Korpelevich, *Extrapolation gradient methods and their relation to modified Lagrange functions*, Ekonom. i Mat. Metody **19** (1976), no. 4.

[KRL+06]   S. Kirolos, T. Ragheb, J. Laska, M. Duarte, Y. Massoud, and R. Baraniuk, *Practical issues in implementing analog-to-information converters*, IEEE 6th Int. Workshop on System on Chip for Real Time Applications, Sept. 2006.

[KXAH10]   A. Khajehnejad, W. Xu, S. Avestimehr, and Babak Hassibi, *Improved sparse recovery thresholds with two step reweighted l1 minimization*, ISIT (Austin), June 2010.

[Lan67]   H. J. Landau, *Necessary density conditions for sampling and interpolation of certain entire functions*, Acta Math. **117** (1967), 37–52.

[Lar04]   R. M. Larsen, *PROPACK: Software for large and sparse SVD calculations*, Stanford, March 2004.

[LBDM+09] I. Loris, M. Bertero, C. De Mol, R. Zanella, and L. Zanni, *Accelerating gradient projection methods for ℓ_1-constrained signal recovery by steplength selection*, Appl. Comput. Harmon. Anal. **27** (2009), no. 2, 247–254.

[LDP07]   M. Lustig, D. L. Donoho, and J. M. Pauly, *Sparse MRI: The application of compressed sensing for rapid MR imaging*, Magn. Reson. Med. **58** (2007), no. 6, 1182–1195.

[LH07]   T. Lin and F. J. Herrmann, *Compressed wavefield extrapolation*, Geophysics **72** (2007), no. 5.

[LKD+07]   J. N. Laska, S. Kirolos, M. F. Duarte, T. Ragheb, R. G. Baraniuk, and Y. Massoud, *Theory and implementation of an analog-to-information converter using random demodulation*, Proc. IEEE ISCAS, New Orleans, May 2007, pp. 1959–1962.

[LLM09]   G. Lan, Z. Lu, and R. D. C. Monteiro, *Primal-dual first-order methods with $o(1/\epsilon)$ iteration-complexity for cone programming*, Math. Program. (2009).

[LO09]   A. S. Lewis and M. L. Overton, *Nonsmooth optimization via BFGS*, Tech. Report 2008/12/2172, Optimization Online, 2009.

[Log65]   B. F. Logan, *Properties of high-pass signals*, Ph.D. thesis, Columbia Univ., New York, 1965.

[Lor09]   I. Loris, *On the performance of algorithms for the minimization of ℓ_1-penalized functionals*, Inverse Problems **25** (2009).

[Lor11]   D. Lorenz, *Constructing test instances for basis pursuit denoising*, Tech. Report 1103.2897, arXiv, 2011.

[LRRB05]   B. Le, T. W. Rondeau, J. H. Reed, and C. W. Bostian, *Analog-to-digital converters*, IEEE Sig. Proc. Mag. (2005), 69–77.

[LST11]   Y.-J. Liu, D. Sun, and K.-C. Toh, *An implementable proximal point algorithmic framework for nuclear norm minimization*, Mathematical Programming (2011).

[Lu09]   Z. Lu, *Primal-dual first-order methods for a class of cone programming*, *Submitted to* INFORMS Journal on Computing (2009), Preprint available at `http://www.math.sfu.ca/~zhaosong/ResearchPapers/pdfirst_DS_2ndrev.pdf`.

[LW10]   Z. Lin and S. Wei, *A block Lanczos with warm start technique for accelerating nuclear norm minimization algorithms*, Tech. Report MSR-TR-2010-162, Microsoft, 2010.

[Mag07]   MIT Tech. Rev. Magazine, *Ten emerging technologies 2007*, `http://www.technologyreview.com/specialreports/specialreport.aspx?id=19`, 2007.

[Mal08]   S. Mallat, *A Wavelet Tour of Signal Processing: The Sparse Way*, Academic Press, 2008.

[Man81]   O. L. Mangasarian, *Iterative solution of linear programs*, SIAM J. Numer. Anal. **18** (1981), no. 4, 606–614.

[McE02]   R. McEliece, *The theory of information and coding*, Cambridge University Press, 2002.

[ME82]   R. Mammone and G. Eichmann, *Restoration of discrete Fourier spectra using linear programming*, J. Opt. Soc. Am. **72** (1982), 987–992.

[ME09a]   M. Mishali and Y. C. Eldar, *Blind multiband signal reconstruction: Compressed sensing for analog signals*, IEEE Trans. Signal Process. **57** (2009), no. 3, 993–1009.

[ME09b]   _____, *Expected RIP: Conditioning of the modulated wideband converter*, IEEE Info. Theory Workshop, October 2009, pp. 343–347.

[ME10]   _____, *From theory to practice: Sub-Nyquist sampling of sparse wideband analog signals*, IEEE J. Sel. Top. Signal Process. **4** (2010), no. 2, 375–391.

[MEDS11]   M. Mishali, Y. C. Eldar, O. Dounaevsky, and E. Shoshan, *Xampling: Analog to digital at sub-Nyquist rates*, IET Cir. Dev. and Systems **5** (2011), no. 1, 8–20.

[MEE09]   M. Mishali, Y. C. Eldar, and A. Elron, *Xampling–part i: Practice*, Tech. Report 0911.0519, arXiv, 2009.

[MGC09]   S. Ma, D. Goldfarb, and L. Chen, *Fixed point and Bregman iterative methods for matrix rank minimization*, Math. Program., Ser A. (2009).

[Mil02]   A. Miller, *Subset selection in regression*, 2 ed., Chapman and Hall/CRC, April 2002.

[MM79]   O. L. Mangasarian and R. R. Meyer, *Nonlinear perturbation of linear programs*, SIAM J. Control Optim. **17** (1979), 745–752.

[Mor62]   J.-J. Moreau, *Fonctions convexes duales et points proximaux dans un espace hilbertien*, R. Acad. Sci. Paris Sér. A Math. **255** (1962), 2897–2899.

[Mor65]   ———, *Proximité et dualité dans un espace hilbertien*, Bull. Soc. Math. France **93** (1965), 273–299.

[Mos02]   Mosek ApS, *The MOSEK optimization tools version 2.5*, 2002, `http://www.mosek.com`.

[MPAL11]   T. Murray, P. Pouliquen, A. G. Andreou, and K. Lauritzen, *Design of a CMOS A2I data converter: Theory, architecture and implementation*, Conference on Information Sciences and Systems (Baltimore), March 2011.

[MSS$^+$10]   M. Mohtashemi, H. Smith, F. Sutton, D. Walburger, and J. Diggans, *Sparse sensing dna microarray-based biosensor: Is it feasible?*, IEEE Sensor. Appl., 2010.

[MT10]   M. McCoy and J. A. Tropp, *Two proposals for robust pca using semidefinite programming*, Tech. Report 1012.1086, arXiv, Dec. 2010.

[MZ93]   S. Mallat and Z. Zhang, *Matching pursuits with time-frequency dictionaries*, IEEE Trans. Sig. Proc. **41** (1993), 3397–3415.

[MZ09]   F. Malgouyres and T. Zeng, *A predual proximal point algorithm solving a non negative basis pursuit denoising model*, Int. J. Comp. Vision **83** (2009), no. 3, 294–311.

[Nas08]   G. P. Nason, *Wavelet methods in statistics with R*, Springer, 2008.

[Nee09]   D. Needell, *Noisy signal recovery via iterative reweighted l1-minimization*, Proc. Asilomar Conf. Signals, Systems, and Computers, 2009.

[Nes83]   Y. Nesterov, *A method for unconstrained convex minimization problem with the rate of convergence $\mathcal{O}(1/k^2)$*, Doklady AN SSSR, *translated as* Soviet Math. Docl. **269** (1983), 543–547.

[Nes88]   Y. Nesterov, *On an approach to the construction of optimal methods of minimization of smooth convex functions*, Ekonomika i Mateaticheskie Metody **24** (1988), 509–517, (Russian).

[Nes04]   ———, *Introductory lectures on convex optimization: A basic course*, Applied Optimization, vol. 87, Kluwer, Boston, 2004.

[Nes05]   Y. Nesterov, *Smooth minimization of non-smooth functions*, Math. Program., Ser. A **103** (2005), 127–152.

[Nes07]   ———, *Gradient methods for minimizing composite objective function*, Tech. report, CORE—Universite Catholique de Louvain, Louvain-la-Neuve, Belgium, 2007.

[NN94]   Y. Nesterov and A. Nemirovsky, *Interior point polynomial algorithms in convex programming*, SIAM, Philadelphia, 1994.

[NT09]   D. Needell and J. A. Tropp, *CoSaMP: Iterative signal recovery from incomplete and inaccurate samples*, Appl. Comput. Harmon. Anal **26** (2009), 301–321.

[NV09]   D. Needell and R. Vershynin, *Uniform uncertainty principle and signal recovery via regularized orthogonal matching pursuit*, Found. Comp. Math. **9** (2009), no. 3, 371–334.

[NV10]   ———, *Signal recovery from inaccurate and incomplete measurements via regularized orthogonal matching pursuit*, IEEE J. Sel. Topics Sig. Proc. **4** (2010), 310–316.

[NW06]   J. Nocedal and S. Wright, *Numerical optimization*, 2 ed., Springer, 2006.

[NY83]   A. Nemirovski and D. Yudin, *Problem complexity and method efficiency in optimization*, Wiley-Interscience Series in Discrete Mathematics, John Wiley & Sons Ltd., 1983.

[OMDY10]   S. Osher, Y. Mao, B. Dong, and W. Yin, *Fast linearized Bregman iteration for compressive sensing and sparse denoising*, Commun. Math. Sci. **8** (2010), no. 1, 93–111.

[OPT00]   M. R. Osborne, B. Presnell, and B. A. Turlach, *A new approach to variable selection in least squares problems*, IMA J. Numer. Anal. **20** (2000), no. 3, 389–403.

[OSK94]   M. S. O'Brien, A. N. Sinclair, and S. M. Kramer, *Recovery of a sparse spike time series by ℓ_1 norm deconvolution*, IEEE Trans. Sig. Proc. **44** (1994), 3353–3365.

[PC79]   A. Papoulis and C. Chamzas, *Improvement of range resolution by spectral extrapolation*, Ultrasonic Imaging **1** (1979), no. 2, 121–135.

[Pop09]   G. Pope, *Compressive sensing: A summary of reconstruction algorithms*, Master's thesis, ETH, Zürich, Feb. 2009.

[Pow77]   M. J. D. Powell, *Restart procedures for the conjugate gradient method*, Math. Program. **12** (1977), 241–254.

[Pro01]   J. G. Proakis, *Digital communications*, vol. 4, McGraw Hill, 2001.

[PSM82]   R. L. Pickholtz, D. L. Schilling, and L B. Milstein, *Theory of spread-spectrum communications—a tutorial*, IEEE Trans. on Comm. **30** (May 1982), no. 5.

[PT74]   B. T. Poljak and N. V. Tretjakov, *An iterative method for linear programming and its economic interpretation*, Matecon **10** (1974), 81–100.

[Ran09]   P. A. Randall, *Sparse recovery via convex optimization*, Ph.D. thesis, California Institute of Technology, May 2009.

[Raz97]   Behzad Razavi, *Rf microelectronics*, Prentice Hall, 1997.

[RG07]   T. Rees and C. Greif, *A preconditioner for linear systems arising from interior point optimization methods*, SIAM J. Sci. Comput. **29** (2007), no. 5.

[RLN⁺08]   T. Ragheb, J. Laska, H. Nejati, S. Kirolos, R. Baraniuk, and Y. Massoud, *A prototype hardware for random demodulation based compressive analog-to-digital conversion*, 51st Midwest Symp. on Circuits and Systems, MWSCAS, 2008, pp. 37–40.

[Roc70]   R. T. Rockafellar, *Convex analysis*, Princeton Landmarks in Mathematics and Physics, Princeton University Press, Princeton, NJ, 1970.

[Roc76]   _____, *Monotone operators and the proximal point algorithm*, SIAM Journal on Control and Optimization **14** (1976), 877–898.

[ROF92]   L. I. Rudin, S. Osher, and E. Fatemi, *Nonlinear total variation noise removal algorithm*, Physica D **60** (1992), 259–268.

[Rom08]   J. K. Romberg, *The Dantzig selector and generalized thresholding*, Proc. IEEE Conf. Info. Sci. and Sys. (Princeton, New Jersey), February 2008.

[Rom09]   J. Romberg, *Compressive sensing by random convolution*, SIAM J. Imag. Sci. **2** (2009), no. 4, 1098–1128.

[RU]   DSP Rice U., *Compressed sensing resources.*, http://www.dsp.ece.rice.edu/cs/.

[SB10]   J.-L. Starck and J. Bobin, *Astronomical data analysis and sparsity: From wavelets to compressed sensing*, Proc. IEEE **98** (2010), no. 6, 1021–1030.

[SBB06]   S. Sarvotham, D. Baron, and R. Baraniuk, *Fast measurement and reconstruction of sparse signals*, IEEE Int. Symp. Info. Theory (Seattle), July 2006.

[Sch78]   U. J. Schwarz, *Mathematical-statistical description of the iterative beam removing technique (method CLEAN)*, Astronomy & Astrophysics (1978), 345.

[SED04]   J.-L. Starck, M. Elad, and D. L. Donoho, *Redundant multiscale transforms and their application for morphological component analysis*, Advances in Imaging and Electron Physics **132** (2004), 287–348.

[SED05]   J.-L Starck, M. Elad, and D. L. Donoho, *Image decomposition via the combination of sparse representation and a variational approach*, IEEE Trans. Image Process. **14** (2005), no. 10, 1570–1582.

[SK02]   M.A. Saunders and B. Kim, *PDCO: Primal-dual interior method for convex objectives*, Tech. report, Stanford University, 2002, Available at `http://www.stanford.edu/group/SOL/software/pdco.html`.

[SNM03]   J.-L. Starck, M. K. Ngyuen, and F. Murtagh, *Wavelets and curvelets for image deconvolution: a combined approach*, Signal Processing **83** (2003), 2279–2283.

[SOS$^+$05] W. Skones, B. Oyama, S. Stearns, J. Romberg, and E. Candès, *Analog to information (A-to-I), technical and management proposal*, August 2005, (in response to DARPA BAA 05-35).

[SS86]   F. Santosa and W. W. Symes, *Linear inversion of band-limited reflection seismograms*, SIAM J. Sci. Stat. Comput **7** (1986), no. 4, 1307–1330.

[Tao]   T. Tao, *Preprints in sparse recovery/compressed sensing.*, `http://www.math.ucla.edu/~tao/preprints/sparse.html`.

[Tao05]   _____, *An uncertainty principle for cyclic groups of prime order*, Math. Res. Letters **12** (2005), 121–127.

[Tao11]   _____, *Topics in random matrix theory, in preparation*, (2011).

[TBM79]   H. L. Taylor, S. C. Banks, and J. F. McCoy, *Deconvolution with the ℓ_1 norm*, Geophysics **44** (1979), no. 1, 39–52.

[TG07]   J. A. Tropp and A. C. Gilbert, *Signal recovery from random measurements via orthogonal matching pursuit*, IEEE Tran. Info. Theory **53** (2007), no. 12.

[The08]   The CMS Collaboration et al., *The CMS experiment at the CERN LHC*, J. Instrumentation **3** (2008).

[Tho82]   D. J. Thomson, *Spectrum estimation and harmonic analysis*, Proc. IEEE **70** (1982), no. 9, 1055–1094.

[Tib96]   R. Tibshirani, *Regression shrinkage and selection via the lasso*, J. Roy. Statist. Soc., Ser. B **58** (1996), no. 1, 267–288.

[TLD+10]   J. A. Tropp, J. N. Laska, M. F. Duarte, J. Romberg, and R. G. Baraniuk, *Beyond Nyquist: Efficient sampling of sparse bandlimited signals*, IEEE Trans. Inform. Theory **56** (2010), no. 1, 520–544.

[Tro04]   J. A. Tropp, *Greed is good: Algorithmic results for sparse approximation*, IEEE Trans. Inform. Theory **50** (2004), 2231–2242.

[Tro06]   ———, *Just relax: Convex programming methods for identifying sparse signals*, IEEE Trans. Inform. Theory **51** (2006), no. 3, 1030–1051.

[Tse08]   P. Tseng, *On accelerated proximal gradient methods for convex-concave optimization*, SIAM J. Optim. (2008).

[TV11]   O. Taheri and S. A. Vorobyov, *Segmented compressed sampling for analog-to-information conversion: Method and performance analysis*, IEEE Tran. Sig. Proc. **59** (2011), no. 2.

[TW10]   J. A. Tropp and S. J. Wright, *Computational methods for sparse solution of linear inverse problems*, Proc. IEEE **98** (2010), no. 6, 948–958.

[TWD+06]   J. A. Tropp, M. Wakin, M. Duarte, D. Baron, and R. Baraniuk, *Random filters for compressive sampling and reconstruction*, Proc. 2006 IEEE Intl. Conf. Acoustics, Speech, and Signal Processing (ICASSP) (Toulouse, France), vol. III, May 2006, pp. 872–875.

[VB96]   L. Vandenberghe and S. Boyd, *Semidefinite programming*, SIAM Review **38** (1996), 49–95.

[vdBF08]   E. van den Berg and M. P. Friedlander, *Probing the Pareto frontier for basis pursuit solutions*, SIAM J. Sci. Comput. **31** (2008), no. 2, 890–912.

[Wal99]   H. Walden, *Analog-to-digital converter survey and analysis*, IEEE J. Sel. Area Comm. **17** (1999), no. 4, 539–550.

[WBFA09]   P. Weiss, L. Blanc-Féraud, and G. Aubert, *Efficient schemes for total variation minimization under constraints in image processing*, SIAM Journal on Scientific Computing **31** (2009), 2047–2080.

[WCW+09]   Y. Wu, C. Chen, Z. Wang, P. Ye, G. R. Arce, D. Prather, and G. J. Schneider, *Fabrication and characterization of a compressive-sampling multispectral imaging system*, Opt. Eng. **48** (2009), no. 12.

[WG11]   D. Weller and V. Goyal, *On the estimation of nonrandom signal coefficients from jittered samples*, IEEE Tran. Sign. Proc. **59** (2011), no. 2, 587–597.

[WGB07]   R. Willett, M. Gehm, and D. Brady, *Multiscale reconstruction for computational spectral imaging*, Comp. Imag. V at SPIE Elect. Imag. (San Jose), 2007.

[WJP$^+$09]   Y. Wiaux, L. Jacques, G. Puy, A. M. M. Scaife, and P. Vandergheynst, *Compressed sensing imaging techniques for radio interferometry*, Mon. Not. R. Astron. Soc. **395** (2009), 1733–1742.

[WLD$^+$06]   M. Wakin, J. Laska, M. Duarte, D. Baron, S. Sarvotham, D. Takhar, K. Kelly, and R. Baraniuk, *An architecture for compressive imaging*, Proc. Intl. Conf. Image Proc. (Atlanta), 2006.

[WNF09]   S. J. Wright, R. D. Nowak, and M. A. T. Figueiredo, *Sparse reconstruction by separable approximation*, IEEE Trans. Signal Process. **57** (2009), no. 7, 2479–2493.

[WR04]   D. Wipf and B. Rao, *Sparse bayesian learning for basis selection*, IEEE Trans. Sig. Proc. **52** (2004), no. 8, 2153–2164.

[Wri97]   S. J. Wright, *Primal-dual interior-point methods*, SIAM, 1997.

[Wri07]   S. J. Wright, *Solving ℓ_1-regularized regression problems*, International Conference "Combinatorics and Optimization", Waterloo, 2007.

[WXT10]   M. Wang, W. Xu, and A. K. Tang, *On the performance of sparse recovery via ℓ_p-minimization ($0 \le p \le 1$), or, Is ℓ_p- minimization ($0 \le p < 1$) always better than ℓ_1-minimization in sparse recovery?*, 2010, Preprint available at `http://networks.ece.cornell.edu/~xu/pub/lp10.pdf`.

[WY10]   Y. Wang and W. Yin, *Sparse signal reconstruction via iterative support detection*, SIAM J. Imag. Sci. **3** (2010), no. 3, 462–491.

[WYGZ10]   Z. Wen, W. Yin, D. Goldfarb, and Y. Zhang, *A fast algorithm for sparse reconstruction based on shrinkage, subspace optimization and continuation*, SIAM J. Sci. Comput. **32** (2010), no. 4, 1832–1857.

[XH07]   W. Xu and B. Hassibi, *Efficient compressive sensing with deterministic guarantees using expander graphs*, Proc. IEEE Info. Theory Workshop (Lake Tahoe), 2007.

[XH11]   ———, *Compressive sensing over the grassmann manifold: a unified geometric framework*, IEEE Trans. Info. Theory, *to appear* (2011).

[YHS08]   Z. Yu, S. Hoyos, and B. M. Sadler, *Mixed-signal parallel compressed sensing and reception for cognitive radio*, ICASSP, 2008, pp. 3861–3864.

[Yin10]   W. Yin, *Analysis and generalizations of the linearized Bregman method*, SIAM J. Imaging Sci. **3** (2010), no. 4, 856–877.

[YOGD08]   W. Yin, S. Osher, D. Goldfarb, and J. Darbon, *Bregman iterative algorithms for ℓ_1 minimization with applications to compressed sensing*, SIAM J. Imaging Sci. **1** (2008), no. 1, 143–168.

[YVGS10]   J. Yu, S. V. N. Vishwanathan, S. Günter, and N. N. Schraudolph, *A quasi-Newton approach to nonsmooth convex optimization problems in machine learning*, J. Machine Learning Research **11** (2010), 1145–1200.

[YW02]   E. A. Yildirim and S. J. Wright, *Warm-start strategies in interior-point methods for linear programming*, SIAM J. Opt. **12** (2002), 782–810.

[YZY10]   J. Yang, Y. Zhang, and W. Yin, *A fast alternating direction method for TV ℓ_1-ℓ_2 signal reconstruction from partial Fourier data*, IEEE J. Sel. Top. Signal Process. **4** (2010), no. 2, 288–297.

[ZBLN97]   C. Zhu, R. H. Byrd, P. Lu, and J. Nocedal, *Algorithm 778: L-bfgs-b: Fortran subroutines for large-scale bound-constrained optimization*, ACM Trans. Math. Software **23** (1997), no. 4.

[ZC08]   M. Zhu and T. Chan, *An efficient primal-dual hybrid gradient algorithm for total variation image restoration*, Tech. Report CAM08-34, UCLA, 2008, Available at `ftp://ftp.math.ucla.edu/pub/camreport/cam08-34.pdf`.

[Zou06]   H. Zou, *The adaptive lasso and its oracle properties*, J. Amer. Stat. Assoc. **101** (2006), 1418–1429.