Variational Bayes Literature Rubric with Scores and Roles

ID	Citation	Type	KL/ELBO	MFVB	FFVB/rich q	Under-dispersion	Priority	BaseScore	TotalScore	Roles (how I will use it)
ExplainingVA	Ormerod & Wand (2010), "Explaining Variational Approximations"	Methodology / tutorial paper	3	3	1	3	High	2.50	3.10	Core conceptual exposition; anchor reference for ELBO, MFVB derivations, and explicit discussion of under-dispersion.
Tran2021	Tran et al. (2021), "A practical tutorial on Variational Bayes"	Tutorial / overview of VB	3	3	2	1	High	2.45	3.05	Core theory (KL/ELBO, MF vs fixed-form); optimisation toolbox (coord. ascent, stochastic / natural-gradient flavour).
GVA-Factor	Ong et al. (2018), "Gaussian Variational Approximation with a Factor Covariance Structure"	High-dimensional Gaussian VB	3	1	3	2	High	2.35	2.95	Fixed-form Gaussian q with structured covariance; key example for richer approximations and variance behaviour.
NG-MixEF	Lin, Khan & Schmidt (2019), "Fast and Simple Natural-Gradient VI with Mixture of EF Approximations"	VB + natural-gradient optimisation	3	1	3	1	High	2.20	2.80	Natural-gradient VB and mixture EF q; optimisation-focused reference and rich q example.
BlackBoxVI	Ranganath et al. (2014), "Black Box Variational Inference"	Core VB methodology	3	2	2	0	High	2.05	2.65	Core ELBO-based VI with stochastic gradients; optimisation toolbox reference for generic non-conjugate models.
StochSearchVB	Paisley et al. (2012), "Variational Bayesian Inference with Stochastic Search"	VB for non-conjugate models	3	3	1	0	High	2.05	2.65	Core theory for logistic/regression-style MFVB in non-conjugate settings; stochastic gradient / control variate example.
RegDensityVB	Nott et al. (2012), "Regression Density Estimation with Variational Methods and Stochastic Approximation"	Application with substantial VB	2	2	2	1	High	1.85	2.45	Application case study; supports narrative on stochastic approximation with VB and flexible regression density models.
FlexMVDE	Giordani et al. (2013), "Flexible Multivariate Density Estimation"	Flexible density modelling with VB	2	1	2	0	Medium	1.45	1.85	Rich q / flexible approximations; background example of variational methods beyond simple MFVB.
SwitchSSM	Ghahramani & Hinton (2000), "Variational Learning for Switching State-Space Models"	Structured VB for time-series models	2	2	1	0	Medium	1.45	1.85	Structured MFVB in state-space models; example of VB beyond simple regression (can be in applications section or appendix).
RECH	Nguyen, Tran & Kohn (2022), "Recurrent Conditional Heteroskedasticity"	Application (volatility / deep model)	1	1	1	1	Medium	1.00	1.40	Modern application of VI in volatility modelling; good for a brief "current practice" example rather than core theory.
NatGradInsights	Martens (2020), "New Insights and Perspectives on the Natural Gradient Method"	Optimisation theory (natural gradient)	1	0	0	0	High	0.35	0.95	Natural gradient theory; background for explaining why natural gradients can be attractive for VB optimisation.
NatGrad-Amari	Amari (1998), "Natural Gradient Works Efficiently in Learning"	Foundational optimisation / information geometry	1	0	0	0	Medium	0.35	0.75	Foundational natural gradient introduction; historical and conceptual support for the optimisation section.
Adam	Kingma & Ba (2015), "Adam: A Method for Stochastic Optimisation"	General optimisation algorithm	0	0	0	0	Medium	0.00	0.40	General optimiser; justifies choice of Adam (or similar) for stochastic ELBO maximisation in experiments.
StochOpt-RM	Robbins & Monro (1951), "A Stochastic Approximation Method"	Foundational stochastic approximation	0	0	0	0	Low	0.00	0.20	Historical reference for SGD-type methods; optional background if you want to mention the roots of stochastic optimisation.
EBSCO-Set	EBSCO search export (2025-11-29)	Search results bundle	0	0	0	0	Low	0.00	0.20	Search pool only; use it to locate additional specific articles rather than as a citable reference itself.

Table 1: variational Bayes references by TotalScore.

ID	Citation (short)	TotalScore	Primary roles
ExplainingVA	Ormerod & Wand (2010)	3.10	Core theory; ELBO/MFVB derivations; under-dispersion anchor.
Tran2021	Tran et al. (2021)	3.05	Core theory; MF vs fixed-form; optimisation toolbox.
GVA-Factor	Ong et al. (2018)	2.95	Fixed-form Gaussian VB with rich covariance; variance behaviour.
NG-MixEF	Lin et al. (2019)	2.80	Natural-gradient VB; mixture EF q; optimisation focus.
BlackBoxVI	Ranganath et al. (2014)	2.65	Gradient-based ELBO optimisation; generic non-conjugate VI.
StochSearchVB	Paisley et al. (2012)	2.65	MFVB for non-conjugate regression-type models; stochastic search gradients.

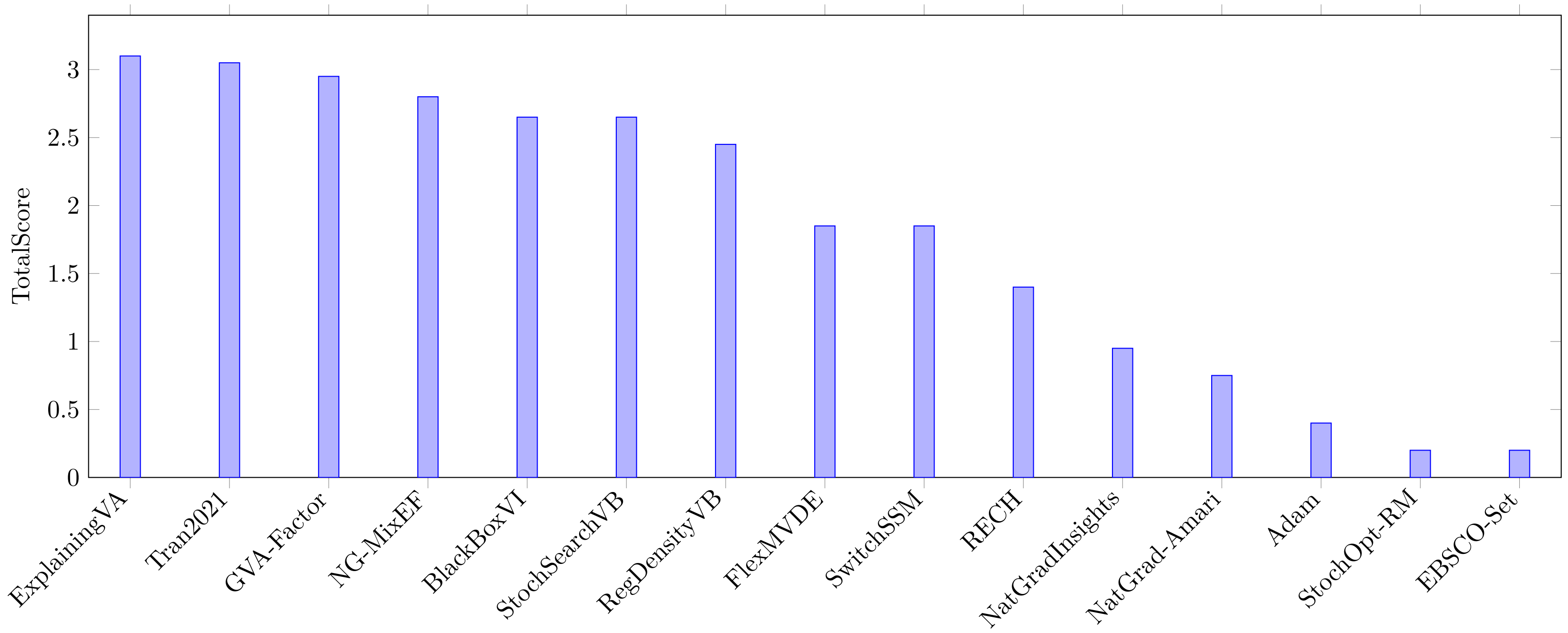

Figure 1: Overall relevance (TotalScore) for variational Bayes references (sorted descending).