

A Bibliography of Publications of Yousef Saad

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Abstract

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Title word cross-reference

3D [GHS10]. $\exp(-\tau A)b$ [SSS10]. $f(A)b$ [CAS11]. *ILU* [LSC03]. *ILUS* [CS97c]. k [CrFS09]. *LU* [CS97c, LSS03b, Saa94d]. $\text{tr}(f(A))$ [CS18, UCS17].

'02 [AGPS03].

1982 [KR83]. **1988** [BTS⁺89]. **1992** [RRV93]. **1993** [BCEP94].

20th [Sv00, BW01].

5 [WS93].

Abaffy [Saa92h]. **ABS** [Saa92h]. **Abstract**

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- Conference** [BCEP94, Fit86, KR83, RRV93]. **Confined** [ÖBSC03]. **Conjugate** [SS85g, SS85f, SS86a, SYEG00, Saa06, HTZ⁺24, Saa85c].
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- Definite** [SS80, VSS14]. **Deflated** [CS97b, SYEG00]. **deflation** [Saa88d]. **Dense** [CS12, ISS84, ISS86, KMB⁺18]. **Dense-Linear-System** [ISS86]. **Densities** [XLS18, BSTC05, LSY16, USS17a]. **Density** [BKS08, BSK⁺03, RGSB08, SS11, dlGGS⁺05]. **density-functional** [RGSB08].
- dependent** [BSK⁺03, RGSB08, dlGGS⁺05]. **Design** [Saa87b, SW95, SW96a, Saa87a, SMSW00]. **Detection** [CS12]. **Development** [Saa22]. **Developments** [BW01]. **Diagonal** [SZ99c, Saa05, TS11, BKS07, TS12].
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- Dirac** [SS11]. **Direct** [SS85e, SS87, SW96b]. **Direction** [SS85c, JSS87]. **disjoint** [Saa83d]. **Distributed** [MS94, Saa92e, Saa94a, SM95, SS98a, SS99a, SS99c, Saa07].
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- E.** [Saa92h]. **Editorial** [Saa00a, BGSS14]. **Effective** [CS09a]. **Efficient** [AJT⁺07, DPS16, GS90b, GS92b, GS92a, NPS16, dlGGS⁺05, LSS86].
- eigendecomposition** [SS14]. **eigenelements** [Saa80c]. **Eigenfaces** [SrFS08]. **Eigenproblems** [ZS07, KCS09, KCS11, SGSM15].
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F [Saa95]. **Face** [KS05a]. **faces** [KS05a]. **Factored** [BS02b, BS02c, BS02a]. **Factorization** [HS06, LS05a, Saa92d, Saa94d]. **Factorizations** [MOKS12, XAKS23, CCS10, XAKS24]. **Fast** [CrFS09, USS17a, UCS17, VS14, XLS18, GS87, GS88b, GS88a, GS89b, GS89d, US19]. **February** [GGL94]. **feedback** [Saa88d]. **Fermi** [SS11]. **few** [Saa94b, Saa94e]. **field** [ZSTC06a, ZSTC06b]. **Filtered** [BKS08, rFS12, Saa06, AKS17, ZSTC06a, ZSTC06b, ZCS14]. **Filtering** [KXS18, LXV+16]. **Filters** [XS16]. **Finding** [Saa03a]. **finite** [CTS93, CTS94, CTWS94, JTD+94, KSS03, KSSG04]. **finite-difference** [CTWS94]. **finite-difference-pseudopotential** [JTD+94]. **first** [AJT+07]. **first-principles** [AJT+07]. **Five** [Saa24]. **fixed** [Saa25]. **fixed-point** [Saa25]. **flexible** [Saa91a, Saa93a]. **flow** [WGSC18]. **flows** [LLCS02]. **fMRI** [SS14]. **forces** [CJWS96]. **format** [CS97c]. **free** [ZCS14]. **frequency** [LXSdH20]. **Function** [XS17, SS11]. **Functional** [BKS08, BSK+03, RGSB08, SS11, dlGGS+05]. **Functions** [FSUS20]. **Further** [BSS10, Saa00b].

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SSZ98, SZ99c, SS99b, Sv00, SZ01, Saa01,

SS02b, Saa03b, Saa07, Saa20, Saa24, SMSW00, ZXS20, ZXS21]. **liquid** [LLCS02]. **localized** [CJWS96]. **Low** [CS09b, DKXS18, LS13a, LS17, UMS17, CS08, LXS16, XLS16, XKL⁺22, ZXS20, ZXS21]. **Low-Rank** [LS13a, LS17, LXS16, XLS16, XKL⁺22, ZXS20, ZXS21]. **LR** [Saa74b]. **LU** [CCS10]. **Lyapunov** [Saa90c].

machine [CSZ22]. **Magnetism** [TZA⁺06]. **March** [GGL94, KR83, RRV93]. **Markov** [PSS92, Saa91c]. **Massively** [FWPS92]. **Material** [SÖS⁺00]. **Materials** [PS20, SCS10]. **mathematical** [Fit86, Fit86]. **Matrices** [CS92, CS94, LSC03, LS13a, ÖBSC03, PS87, Saa85b, SW89, Saa96, SZ99b, Saa16, BSS09, CS93, CS96, CS97d, CS97e, LS05a, LSY16, PS85, Ruh94, Saa74a, Saa80c, Saa84a, Saa86b, Saa86e, Saa92c, Saa94c, UMS17, XLS16, XKL⁺22]. **Matrix** [AGPS03, ASSS11, AEKS90, BDG⁺10, FSUS20, FWPS92, IS86a, OKLS15, PSWF93, SW88a, Saa92b, Saa94a, SW94, TS11, XAKS23, BJR⁺09, BKS07, BGSS14, CCE⁺18, CS98a, Saa83a, Saa83b, SW88b, Saa90a, SW95, SW96a, SAD⁺00, TS12, USS17a, US19, VSS14, XAKS24, dIGGS⁺05, KR83]. **Memory** [Saa87b, SM95, Saa87a]. **Message** [Saa87b, Saa87a, WS93]. **Method** [SS80, Saa87d, CTS93, CTS94, CTWS94, CS18, EGMS20, JTD⁺94, KSS03, KSSG04, LSS86, Saa80c, Saa85c, Saa23, SCS12, TS12, ZS08, ZCS14]. **Methods** [BTS⁺89, Cha96, CCSY98, CS14, DS91b, GS92a, LS17, PSS92, SS81, SS85c, SS85e, SS85f, SS86a, Saa87b, SS87, Saa91b, Saa92e, Saa93b, Saa97, SCS10, Saa11a, Saa11b, Saa22, SSW98, SÖS⁺00, TS11, ACSS12, BSS09, BS87, BS89, BS90, BS91, CSS02, CS85b, rFS09, Fit86, GS90b, GS92b, GGL94, JSS87, JSS07, KS92, KCS09, KCS11, Saa80a, Saa80b, Saa81, Saa82a, Saa82b, Saa83d, Saa83b, Saa83e, Saa84c, Saa87a, Saa88d, Saa89a, Saa90b, Saa90d, Saa91c, Saa92g, Saa92f, Saa98, Saa01, Saa03b, Saa20, Saa24, Saa25, SS98b]. **minimal** [SS86c, SW93, SW96b]. **minimum** [Saa00b]. **Minneapolis** [BTS⁺89, GGL94]. **Minnesota** [BTS⁺89, GGL94]. **MIQR** [LS06]. **Modeling** [PSS92, Fit86]. **models** [Saa91c]. **modern** [CSS02, SSC04]. **modes** [SLX⁺22]. **Modification** [MOKS12]. **Modified** [CS99, Saa84a, Saa86b]. **module** [SW94, SW95, SW96a]. **Molecular** [CJWS96, BGB⁺10, JTD⁺94]. **molecular-dynamics** [JTD⁺94]. **molecules** [CTWS94]. **moment** [Saa84a, Saa86b]. **Multi** [Saa96, Saa92c, SSZ98, SZ99c, SZ01]. **Multi-Elimination** [Saa96, Saa92c]. **multi-level** [SSZ98, SZ99c, SZ01]. **Multicolor** [ZXS20, SS99b]. **Multielimination** [SZ99a]. **Multigrid** [CS85a, CS86]. **Multilevel** [BS05b, KXS18, LS06, SZ99a, SZ99b, Saa05, SrFS08, LSS03a, OKLS15, SS02b, SST04, SSC04, US19, XLS16, XKL⁺22]. **multiple** [KMB⁺18]. **Multiprocessor** [CS85a, CSS85, CS86, ISS84, ISS86, CSS87]. **Multiprocessors** [SS85c, Saa85a, JSS87, SS81, Saa86c]. **multisecant** [rFS09]. **Multistage** [HS06]. **Multivariate** [CS14].

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[BSS09, SLX⁺22]. **North** [BCEP94]. **null** [ITS07]. **null-space** [ITS07]. **number** [Saa86e]. **numbers** [Saa84a, Saa86b]. **Numerical** [BW01, PSS92, RRV93, Saa83b, Saa87b, Saa89b, Saa90c, Saa92g, SCS10, Saa11b, Saa87a, Saa91c].

oblique [Saa80a, Saa82a]. **Observer** [DS91b]. **October** [BTS⁺89]. **ODE** [GS81, GS83]. **Ohio** [RRV93]. **Operator** [Saa92b, CS98a]. **OPRA** [KS05a]. **OPRA-faces** [KS05a]. **Optimal** [CS09b, CS08]. **Optimization** [NBS10, NBS12, BSS09, KCS09, KCS11]. **order** [CSW00, CTWS94, JTD⁺94]. **Origin** [Saa22, Saa74c]. **Orthogonal** [CS09b, KS05b, KS07, CS08, Saa83d]. **orthogonalization** [SW93, SW96b]. **other** [Saa80a, Saa82a]. **outer** [Saa91a, Saa93a]. **Overlapping** [CS92, CS93, CS96, LS05b]. **overview** [Saa90d].

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[Saa87b, Saa87a, WS93]. **Pencils** [KR83, XAKS23, XAKS24]. **Performance** [WS93]. **periodic** [AJT⁺07]. **perturbative** [SLX⁺22]. **Phase** [WGSC18]. **physical** [CSS02, SSC04]. **Pite** [KR83]. **Pivoting** [BS02b, BS02a, LS05a]. **plane** [JKSC99, Saa83a, Saa84a, Saa86b, Saa86e, Saa87c]. **plane-wave** [JKSC99]. **planets** [SLX⁺22]. **PMAA** [AGPS03]. **PMAA'10** [ASSS11]. **Point** [LS03, LSS03b, Saa25]. **pole** [Saa88d]. **Polynomial** [BKS08, CAS11, FSUS20, LXV⁺16, YXS21, GS90b, LXSdH20, Saa85c]. **polynomials** [Saa83d, Saa83a, Saa87c, SSS10]. **portable** [SKL⁺97]. **Positive** [SS80, VSS14]. **posteriori** [CS18]. **potential** [CTS93, CTS94]. **power** [ZXS21]. **Practical** [BTS⁺89, Saa84c, Saa85c, BTS⁺89]. **Preconditioned** [CCSY98, CS14, SS85f, SS86a, Saa91b, Saa93b, Saa98, LS13b, Saa91a, Saa92f, Saa93a]. **Preconditioner** [BS02b, DKXS18, LS05b, LS06, Saa96, SZ99a, SZ99b, XS17, BS02a, CS97c, Saa92c, XLS16, ZXS20, ZXS21]. **Preconditioners** [BS05b, CS94, CS98b, LS13a, LS17, LS03, LSS03b, MS92, MS93, MS94, CS97a, CSW00, CS97e, CS97f, GSS03, LXS16, Saa94c, SZ99c, Saa07]. **Preconditioning** [CS98a, KSS03, KSSG04, OKS10, Saa88a, Saa88b, Saa88c, SAD⁺00, Saa03a, SMSW00, SSF93, YXS21, LXSdH20, OKLS15, SS99b, SZ01, SSF95, VSS14, WSS98, XKL⁺22]. **preconditionings** [Saa85c]. **Predicting** [SÖS⁺00, CTJ⁺95]. **Preserving** [CCSY98, KS07, KS05b]. **Prewhitening** [SS14]. **primitives** [WS93]. **principles** [AJT⁺07]. **probing** [TS12]. **Problem** [NBS10, NBS12, CKV⁺03, Saa23, SCS12, Saa83c]. **Problems** [BSS10, DS91b, rFS12, GGL94, IS85, LS06, LXV⁺16, LS03, LSS03b, MS07b, PS89, Saa84b, Saa11b, Saa16, SSF93, XLS18, CSW00, DS91a, EGMS20, FRSY96, IS86b, KLS16, KKPS18, Ruh94, Saa82b, Saa83a, Saa83b, Saa83e, Saa89b, Saa90d,

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[AS88, AS89, CSS85, CSS87, LXSdH20, MS92, MS93, PS89, SS80, Saa84b, SS85g, SS85e, SSS85, Saa87d, SS87, SS02a, BS91, CS85b, EGMS20, ESS86, LSS86, Saa80a, Saa81, Saa82a, Saa82b, Saa83a, Saa83e, Saa84c, SS86c, SL86, Saa87c, SL88, ZCS14]. **Some** [GS89d, SW89, Saa92b, BSS09, Saa84c, Saa86e]. **SOR** [MS94]. **Space** [YXS21, CKV⁺03, ITS07]. **SPARK** [SW90]. **Sparse** [AEKS90, CS92, Cha96, CS94, CS98b, FWPS92, GHS10, GGL94, IS86a, LSC03, LS06, MS92, MS93, MS94, PSWF93, PS89, SW88a, SW89, Saa94a, SW94, SM95, Saa96, SS98a, SZ99a, SZ99b, SS99a, SS99c, SS02a, XS17, AS88, AS89, CS93, CS96, CS97c, GSS03, JSS07, LS05a, Saa82b, Saa83a, Saa83e, SW88b, SW90, Saa90a, Saa92c, Saa94c, SW95, SW96a, SKL⁺97, SSZ98, SZ99c, SAD⁺00, SZ01, Saa01, SS02b, Saa03b, Saa07, SSF95, XLS16, XKL⁺22, ZXS20, ZXS21, ZCS14]. **Sparse-Sparse** [CS98b]. **SPARSKIT** [Saa90a]. **Special** [ASSS11, BJR⁺09, BDG⁺10]. **Spectra** [XS16, CJWS96]. **Spectral** [BS05a, KLS16, SGSM15, XLS18, XAKS23, LSY16, USS17a, XAKS24]. **Spectrum** [DS91b, FSUS20, SCS12]. **Spectrum-Adapted** [FSUS20]. **Spedicato** [Saa92h]. **Squares** [CAS11, LS06, XS16, Saa83a, Saa84a, Saa86b, Saa86e, Saa87c]. **standard** [SS99c]. **Standards** [AEKS90]. **state** [Saa88d]. **states** [BGB⁺10, SKBS88]. **Statistics** [SW89]. **Stewart** [CJ04]. **Stiefel** [SS80]. **Stochastic** [UCS17]. **Strategies** [MS07b, MOKS12, PS87, SS99c, LLC02, PS85, SZ01, SGSM15, SMSW00]. **Strategy** [MS07a]. **structural** [CTJ⁺95]. **Structure** [SCS10, AJT⁺07, CTS93, CTS94, CKV⁺03, JKSC99, SSC⁺96]. **Structured** [GGL94, CCE⁺18, FRSY96]. **Structures** [Saa94a, SM95, Saa03a]. **study** [CS97e]. **Subgraph** [CS12]. **Subspace** [CCSY98, CS14, Saa91b, Saa92b, Saa92e, Saa93b, Saa97, Saa11a, Saa16, Saa22, ACSS12, BSS09, BS89, CS97b, ESS86, Saa81, Saa84c, Saa89a, Saa90b, Saa90d, Saa92f, Saa98, Saa23, ZSTC06a, ZSTC06b, ZCS14]. **Subspaces** [BKS08, PS07]. **Substructuring** [KXS18]. **sum** [CS97a]. **Supercomputer** [BTS⁺89, Saa91b, Saa93b]. **Supercomputers** [PS89, Saa89a]. **SVD** [CS08, CS09b]. **Sweden** [KR83]. **Sylvester** [DS91b]. **Sylvester-Like** [DS91b]. **Symmetric** [LS13a, LSS03b, Saa83c, Saa87d, SSF93, ZS07, KLS16, KKPS18, LS05a, Saa83d, Saa23, SSF95, SS98b, VSS14, WSS98, XLS16, ZS08]. **Symmetry** [CCSY98]. **System** [ISS84, ISS86, BS87, ITS07, KMB⁺18]. **Systems** [DKXS18, MS92, MS93, MS94, ÖBSC03, SS80, SS85g, SS85e, Saa87d, SS87, SS98a, SZ99a, SS99a, SS99c, SS02a, XS17, AJT⁺07, AS88, AS89, BCRZS22, BS90, BS91, CS85b, CJWS96, ESS86, GSS03, JSS07, KS92, OKS10, Saa80a, Saa81, Saa82a, Saa83d, Saa84c, SS86c, Saa87c, Saa88a, Saa88b, Saa88c, SSZ98, SZ99c, SS99b, Sv00, SZ01, Saa01, SS02b, Saa03b, Saa07, Saa20, Saa24, SMSW00, VSS14, ZXS20, ZXS21, Cha96]. **Technique** [KS07]. **Techniques** [IS86a, Saa84b, SS99a, BCRZS22, CS97b, CS97d, KLS16, KSS03, KSSG04, KS87, Saa74a, Saa88a, Saa88b, Saa88c, SSZ98, SZ99c, SS99b, SAD⁺00, SS98b, WSS98]. **Tensor** [CS97a, CS09b, CS08]. **Tensors** [CS09b, CS08]. **Texas** [Fit86]. **their** [GS89d, Saa87c]. **Theoretical** [Saa94b, Saa94e]. **Theory** [BKS08, BSS09, BS94, BSK⁺03, RGSB08, Saa90b, SS11, dLGS⁺05]. **thermoacoustics** [SGSM15]. **Thick** [LXV⁺16, SSW98]. **Thick-Restart** [LXV⁺16]. **three** [LSS86, LXSdH20]. **three-dimensional** [LSS86, LXSdH20]. **Threshold** [MOKS12, Saa92d, Saa94d, SZ99c].

Threshold-based [MOKS12]. **time** [BSK⁺03, RGSB08, dlGGS⁺05].

time-dependent

[BSK⁺03, RGSB08, dlGGS⁺05]. **tire**

[SMSW00]. **tool** [Saa90a]. **Tools**

[SÖS⁺00, Saa92a]. **Topological**

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[KCS09, KCS11, NBS10, NBS12].

Transformations [BRZS18]. **translations**

[Saa74b]. **trends** [Saa92f]. **triangular**

[AS88, AS89]. **Turbo** [RGSB08]. **Two**

[rFS09, Saa83d]. **Type** [Saa94b, TS11,

BCRZS22, Saa94e, SSZ98, Saa06].

understanding [CLS24]. **Unstructured**

[MS94]. **unsymmetric**

[Saa80a, Saa80c, Saa81, Saa82a]. **updating**

[VS14]. **USA** [RRV93]. **use**

[Saa84c, Saa85c, Saa87c]. **Using**

[BKS08, CKV⁺03, SS98a, SSC04, BS05a,

CS18, JTD⁺94, KS05a, LXSdH20, OKLS15,

Saa83d, USS17a, UMS17, VSS14, ZSTC06b].

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USS17b, WGSC18, XAKS23, XAKS24,

YXS21, ZSTC06a]. **Vibrational**

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wave [JKSC99, LSS86, SL86, SL88]. **wide**

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