

# The Comprehensive Analytic Element Bibliography

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NOTE: The following “comprehensive” bibliography is only *ideally* comprehensive, as the results were obtained via internet searches and online citation databases. These methods, of course, leave plenty of room for omission. If you know of publications that deserve to be on this list but are not, please contact [jrcraig@uwaterloo.ca](mailto:jrcraig@uwaterloo.ca).

## References by Journal

[[These are not up to date]]

- Advances in Water Resources: 11
- Water Resources Research: 28
- Journal of Hydrology: 33
- Ground Water: 31

## References by Category

The items in **bold** are the authoritative, most influential, or most comprehensive references on a given subtopic (as determined by JRC). The following list only includes conference papers, not conference abstracts.

- General
  - Textbooks:*  
**(Strack 1989; Haitjema 1995a)**(Fitts 2002)
  - Initial AEM Developments:*

(Strack 1981a; Strack 1981b; Strack 1982b; Strack 1982a; Strack and Haitjema 1981a; Strack and Haitjema 1981b)

*Overviews:*

**(Strack 2003b)** (Strack 1999; Strack 2002; Strack 2003a; Kraemer 2003)

*Stream Function/Particle Tracking:*

(Haitjema and Kelson 1997; Strack 1984)

*Dupuit-Forcheimer Assumption:*

(Strack et al. 2006; Strack and Verruijt 2003; Anderson 2003c)

*Regional Modeling:*

(de Lange 2003)

- 2D Elements

*Inhomogeneities:*

**(Strack 1989; Janković 1997)** (Strack 1982a; Fitts 1985; Obdam and Veling 1987; Fitts 1990; Fitts 1991; Fitts 1997; Janković et al. 2003; Suribhatla et al. 2004)

*Anisotropy:*

(Fitts 2006)

*High-order elements:*

**(Strack 1989; Janković 1997)** (Janković and Barnes 1999a; Janković and Barnes 1999b; Le Grand 1999; Grand 2003)

*Divergent Elements (Area-sinks):*

**(Strack 1989; Strack and Janković 1999)** (Zaadnoordijk and Strack 1993; Miller 2001; Wendland et al. 2004)

- 3D Elements

*General:*

**(Haitjema 1982)**

*Inhomogeneities:*

(Fitts 1990; Janković 1997; Janković and Barnes 1999b)

*Mixed 2D/3D:*

**(Haitjema 1985)** (Luther and Haitjema 2000; Strack and Barnes 2003)

*Partially Penetrating Wells:*

**(Luther 1998; Luther and Haitjema 1999)** (Haitjema and Kramer 1988; Steward 1999; Bakker 2001; Steward 2001; Steward and Jin 2001; David 2003; Steward and Jin 2003; Steward and Jin 2006)

- Multiple Layers

**(Hemker 1984; Bakker 1999; Bakker and Hemker 2002; Bakker and Strack 2003; Bakker 2006a)** (Heitzman 1977; Hemker and Maas 1987; Hemker 1985; Hemker and Maas 1987; Hemker 1999b; Hemker 1999a; Bakker 2002c; Bakker 2003b; Bakker 2004a; Bakker and Neiber 2004a; Hansen 2002; Keil 1982; Maas 1986; Hemker et al. 2004; Bakker et al. 2005; Strack 2006)

- Transient Flow

(Strack 2006)

*Periodic Transience:*

**(Bakker 2004c)** (Bakker 2004b)

*Finite Difference:*

**(Zaadnoordijk 1988)** (Haitjema 1991a; Zaadnoordijk and Strack 1993; Bakker 1998; Barnes and Strack 2003; Yang 2003; Bakker 2004b)

*Laplace Transform:*

**(Furman and Neuman 2003)** (Furman and Neuman 2004)

- Unsaturated Flow

(Bakker and Neiber 2004a; Bakker and Neiber 2004b; Furman and Warrick 2005)

- AEM and Surface Water

**(Mitchell-Bruker and Haitjema 1996)** (Bakker 2004a; Hunt et al. 2003)

- Saltwater Intrusion

**(Bakker et al. 1999; Bakker 2003a; Strack 1995)** (Bakker 2000b; Strack 1978b; Strack and Bakker 1995; Bakker 2006b)

- AEM and Contaminant Transport

*Dispersion Studies:*

**(Janković et al. 2003)** (Dagan et al. 2003; Janković 2002a; Janković and Fiori 2004; Janković 2002b)

*Linking AEM to Transport Models:*

**(Craig 2005)** (Craig and Rabideau 2004; Rumbaugh 1993; P. Grasshoff 1994)

*Moving Front Dispersion*

(Maas 1994; Fairbrother 1994)

- Applications

*Overview:*

**(Hunt 2006)**

*Yucca Mountain:* (Bakker et al. 1999)

*Netherlands:* (de Lange 2006; de Lange 1991; de Lange 1996b; van der Meij and Minnema 1999; Stoepker and de Lange 2003)

*Indiana:* (Haitjema 1992; Wittman et al. 1997)

*Iowa:* (Simpkins 2006)

*Wisconsin:* (Hunt and Krohelski 1996; Hunt et al. 2000)

*Minnesota:* (Streitz et al. 1999; Locke 1992)

*South Carolina:* (Sarris et al. 2003) (Moorman 1999; Lanini et al. 2003)

*Florida:* (Wilsnack et al. 2005)

*Vulnerability indexing:* (Fredrick et al. res)

*Carbonate Aquifers:* (Johnson and Miffin 2006)

*Effective Properties:* (Janković et al. 2006)

*Building Pit Dewatering:* (Zaadnoordijk 2006)

- Capture Zone / Source Water Assessment  
(**Bakker and Strack 1996; Wuolo et al. 1995**) (Kraemer and Burden 1992; Haitjema 1995b; Haitjema et al. 1995; Luther and Haitjema 1998; Raymond et al. 2006; Mazda Kompani-Zare and Samani 2005)
- Optimization/Parameter Estimation  
(Fitts 1994; Kelson et al. 2002; Power and Barnes 1993; Dripps et al. 2006)
- Interfaces/GIS  
*Interfaces*: (Kelson et al. 1993; Yager and Neville 2000) *GIS*: (Steward and Bernard 2006; Steward 2003; Sinha et al. 2004)
- Computational Advances  
*Superblocks*: (Strack et al. 1999; Craig et al. 2006), *Iterative Algorithm*: (Janković and Barnes 1999a; Craig et al. 2003), *Direct Algorithm*: (Haitjema 2006; Haitjema 2003)

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