

Table 5. Most cited papers 2005–2010 as listed by Scopus on 1 August 2010.

Rank	Author	Title	Year	Times cited
1	WAPENAAR, K; FOKKEMA, J	GREEN'S FUNCTION REPRESENTATIONS FOR SEISMIC INTERFEROMETRY	2006	80
2	BAKULIN, A, CALVERT, R	THE VIRTUAL SOURCE METHOD: THEORY AND CASE STUDY	2006	71
3	SNIEDER, R, WAPENAAR, K, LARNER, K	SPURIOUS MULTIPLES IN SEISMIC INTERFEROMETRY OF PRIMARIES	2006	49
4	CONSTABLE, S, WEISS, CJ	MAPPING THIN RESISTORS AND HYDROCARBONS WITH MARINE EM METHODS: INSIGHTS FROM 1D MODELING	2006	44
5	ZHANG, Y, ZHANG, G, BLEIS-TEIN, N	THEORY OF TRUE-AMPLITUDE ONE-WAY WAVE EQUATIONS AND TRUE-AMPLITUDE COMMON-SHOT MIGRATION	2005	44
6	SHIN, C; MIN, D-J	WAVEFORM INVERSION USING A LOGARITHMIC WAVEFIELD	2006	42
7	CONSTABLE, S; SRNKA, LJ	AN INTRODUCTION TO MARINE CONTROLLED-SOURCE ELECTROMAGNETIC METHODS FOR HYDROCARBON EXPLORATION	2007	40
8	MEHTA, K; BAKULIN, A; SHEIMAN, J; CALVERT, R; SNIEDER, R	IMPROVING THE VIRTUAL SOURCE METHOD BY WAVEFIELD SEPARATION	2007	38
9	LAROSE, E; MARGERIN, L; DERODE, A; VAN TIGGELEN, B; CAMPILLO, M; SHAPIRO, N; PAUL, A; STEHLY, L; TANTER, M	CORRELATION OF RANDOM WAVEFIELDS: AN INTERDISCIPLINARY REVIEW	2006	36
10	BATZLE, ML; HAN, D-H; HOFMANN, R	FLUID MOBILITY AND FREQUENCY-DEPENDENT SEISMIC VELOCITY - DIRECT	2006	36
11	ZHU, Y; TSVANKIN, I	PLANE-WAVE PROPAGATION IN ATTENUATIVE TRANSVERSELY ISOTROPIC MEDIA	2006	28
12	NABIGHIAN, MN; GRAUCH, VJS; HANSEN, RO; LAFEHR, TR; LI, Y; PEIRCE, JW; PHILLIPS, JD; RUDER, ME	THE HISTORICAL DEVELOPMENT OF THE MAGNETIC METHOD IN EXPLORATION	2005	28
13	KOMATITSCH, D; MARTIN, R	AN UNSPLIT CONVOLUTIONAL PERFECTLY MATCHED LAYER IMPROVED AT GRAZING INCIDENCE FOR THE SEISMIC WAVE EQUATION	2007	27
14	AL-DOSSARY, S; MARFURT, KJ	3D VOLUMETRIC MULTISPECTRAL ESTIMATES OF REFLECTOR CURVATURE AND ROTATION	2006	27
15	HINZE, WJ; AIKEN, C; BROZENA, J; COAKLEY, B; DATER, D; FLANAGAN, G; FORSBERG, R; HILDENBRAND, T; KELLER, GR; KELLOGG, J; KUCKS, R; LI, X; MAINVILLE, A; MORIN, R; PILKINGTON, M; PLOUFF, D; RAVAT, D; ROMAN, D; URRUTIA-FUCUGAUCHI, J; VÉRONNEAU, M; WEBRING, M; WINESTER, D	NEW STANDARDS FOR REDUCING GRAVITY DATA: THE NORTH AMERICAN GRAVITY DATABASE	2005	27
16	SAVA, P; FOMEL, S	TIME-SHIFT IMAGING CONDITION IN SEISMIC MIGRATION	2006	26
17	CARCIONE, JM; PICOTTI, S	P-WAVE SEISMIC ATTENUATION BY SLOW-WAVE DIFFUSION: EFFECTS OF INHOMOGENEOUS ROCK PROPERTIES	2006	26
18	GRASMUECK, M; WEGER, R; HORSTMAYER, H	FULL-RESOLUTION 3D GPR IMAGING	2005	26
19	GERSTOFT, P; SABRA, KG; ROUX, P; KUPERMAN, WA; FEHLER, MC	GREEN'S FUNCTIONS EXTRACTION AND SURFACE-WAVE TOMOGRAPHY FROM MICROSEISMS IN SOUTHERN CALIFORNIA	2006	24
20	GRECHKA, V; KACHANOV, M	EFFECTIVE ELASTICITY OF ROCKS WITH CLOSELY SPACED AND INTERSECTING CRACKS	2006	24

Table 5. Most cited papers 2005–2010 as listed by Scopus on 1 August 2010. (continued)

21	SINHA, S; ROUTH, PS; ANNO, P.D; CASTAGNA, JP	SPECTRAL DECOMPOSITION OF SEISMIC DATA WITH CONTINUOUS-WAVELET TRANSFORM	2005	24
22	LAPENNA, V; LORENZO, P; PER-RONE, A; PISCITELLI, S; RIZZO, E; SDAO, F	2D ELECTRICAL RESISTIVITY IMAGING OF SOME COM- PLEX LANDSLIDES IN THE LUCANIAN APENNINE CHAIN, SOUTHERN ITALY	2005	24
23	BOHLEN, T; SAENGER, EH	ACCURACY OF HETEROGENEOUS STAGGERED-GRID FINITE-DIFFERENCE MODELING OF RAYLEIGH WAVES	2006	23
24	URSIN, B; STOVAS, A	TRAVELTIME APPROXIMATIONS FOR A LAYERED TRANS- VERSELY ISOTROPIC MEDIUM	2006	23
25	GRAY, SH	GAUSSIAN BEAM MIGRATION OF COMMON-SHOT RE- CORDS	2005	23
26	FOMEL, S	SHAPING REGULARIZATION IN GEOPHYSICAL-ESTIMA- TION PROBLEMS	2007	22
27	ZHANG, Y; SUN, J; NOTFORS, C; GRAY, SH; CHERNIS, L; YOUNG, J	DELAYED-SHOT 3D DEPTH MIGRATION	2005	22
28	XU, S; ZHANG, Y; PHAM, D; LAMBARÉ, G	ANTILEAKAGE FOURIER TRANSFORM FOR SEISMIC DATA REGULARIZATION	2005	22
29	ABUBAKAR, A; HABASHY, TM; DRUSKIN, VL; KNIZHNERMAN, L; ALUMBAUGH, D	2.5D FORWARD AND INVERSE MODELING FOR INTER- PRETING LOW-FREQUENCY ELECTROMAGNETIC MEA- SUREMENTS	2008	21
30	OPERTO, S; VIRIEUX, J; AMESTOY, P; L'EXCELLENT, J-Y; GIRAUD, L; ALI, HBH	3D FINITE-DIFFERENCE FREQUENCY-DOMAIN MODEL- ING OF VISCO-ACOUSTIC WAVE PROPAGATION USING A MASSIVELY PARALLEL DIRECT SOLVER: A FEASIBILITY STUDY	2007	21
31	GRIBENKO, A; ZHDANOV, M	RIGOROUS 3D INVERSION OF MARINE CSEM DATA BASED ON THE INTEGRAL EQUATION METHOD	2007	21
32	ADAM, L; BATZLE, M; BREVIK, I	GASSMANN'S FLUID SUBSTITUTION AND SHEAR MODU- LUS VARIABILITY IN CARBONATES AT LABORATORY SEIS- MIC AND ULTRASONIC FREQUENCIES	2006	21
33	WU, R-S; CHEN, L	DIRECTIONAL ILLUMINATION ANALYSIS USING BEAM- LET DECOMPOSITION AND PROPAGATION	2006	21
34	WANG, Y	INVERSE Q-FILTER FOR SEISMIC RESOLUTION ENHANCE- MENT	2006	21
35	GRECHKA, V; KACHANOV, M	SEISMIC CHARACTERIZATION OF MULTIPLE FRACTURE SETS: DOES ORTHOTROPY SUFFICE?	2006	21
36	HELBIG, K; THOMSEN, L	75-PLUS YEARS OF ANISOTROPY IN EXPLORATION AND RESERVOIR SEISMICS: A HISTORICAL REVIEW OF CON- CEPTS AND METHODS	2005	21
37	ASTEN, MW	ON BIAS AND NOISE IN PASSIVE SEISMIC DATA FROM FINITE CIRCULAR ARRAY DATA PROCESSED USING SPAC METHODS	2006	20
38	AMUNDSEN, L; LØSETH, L; MITTET, R; ELLINGSRUD, S; URSIN, B	DECOMPOSITION OF ELECTROMAGNETIC FIELDS INTO UPGOING AND DOWNGOING COMPONENTS	2006	20
39	DRAGANOV, D; WAPENAAR, K; THORBECKE, J.	SEISMIC INTERFEROMETRY: RECONSTRUCTING THE EARTH'S REFLECTION RESPONSE	2006	20
40	MARFURT, KJ	ROBUST ESTIMATES OF 3D REFLECTOR DIP AND AZI- MUTH	2006	20
41	PŠENČÍK, I; FARRA, V	FIRST-ORDER RAY TRACING FOR QP WAVES IN INHOMO- GENEOUS, WEAKLY ANISOTROPIC MEDIA	2005	20
42	SAVA, P; FOMEL, S	RIEMANNIAN WAVEFIELD EXTRAPOLATION	2005	20
43	DOUMA, H; DE HOOP, MV	LEADING-ORDER SEISMIC IMAGING USING CURVELETS	2007	19
44	DROSSAERT, FH; GIANOPOU- LOS, A	A NONSPLIT COMPLEX FREQUENCY-SHIFTED PML BASED ON RECURSIVE INTEGRATION FOR FDTD MODELING OF ELASTIC WAVES	2007	19

Table 5. Most cited papers 2005–2010 as listed by Scopus on 1 August 2010. (continued)

45	VAN WIJK, K	ON ESTIMATING THE IMPULSE RESPONSE BETWEEN RECEIVERS IN A CONTROLLED ULTRASONIC EXPERIMENT	2006	19
46	SCHUSTER, GT; ZHOU, M	A THEORETICAL OVERVIEW OF MODEL-BASED AND CORRELATION-BASED REDATUMING METHODS	2006	19
47	LÜTH, S; BUSKE, S; GIESE, R; GOERTZ, A	FRESNEL VOLUME MIGRATION OF MULTICOMPONENT DATA	2005	19
48	SYMES, WW	REVERSE TIME MIGRATION WITH OPTIMAL CHECKPOINTING	2007	18
49	ZHDANOV, MS; LEE, SK; YOSHIOKA, K	INTEGRAL EQUATION METHOD FOR 3D MODELING OF ELECTROMAGNETIC FIELDS IN COMPLEX STRUCTURES WITH INHOMOGENEOUS BACKGROUND CONDUCTIVITY	2006	18
50	BONESS, NL; ZOBACK, MD	A MULTISCALE STUDY OF THE MECHANISMS CONTROLLING SHEAR VELOCITY ANISOTROPY IN THE SAN ANDREAS FAULT OBSERVATORY AT DEPTH	2006	18